

# Instruction Manual

## APG Series Analog Pyrometer Gauge

### APG-SD-XL-X200-X Pyrometer



# Instruction Manual - APG Series Pyrometer

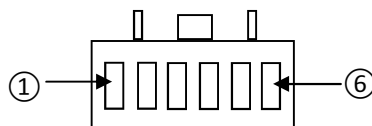
## Wiring Harness:

Pin Number	Color	Function
1	Red	Gauge Power Input ** Note: +10 to +16 VDC
2	White / Red	Thermocouple Probe + Note: Type K thermocouple +
3	White / Blue	Thermocouple Probe - Note: Type K thermocouple -
4	Black	Gauge Power Ground (Connect to Vehicle Chassis)
5	Yellow	Gauge ON / OFF Control ***
6	Purple	Nighttime Mode Display Dim Input * Note: Hi/LO Function activated with input voltage > 5 V

\* Typically connected to parking light (front sidelights) switch

\*\* **CAUTION:** As a safety precaution, the +12V terminal of this product should be fused before connecting to the 12V ignition switch. We recommend using a 1 Amp, 3AG fast-acting type cartridge fuse (Littlefuse® # 312 001 or an equivalent).

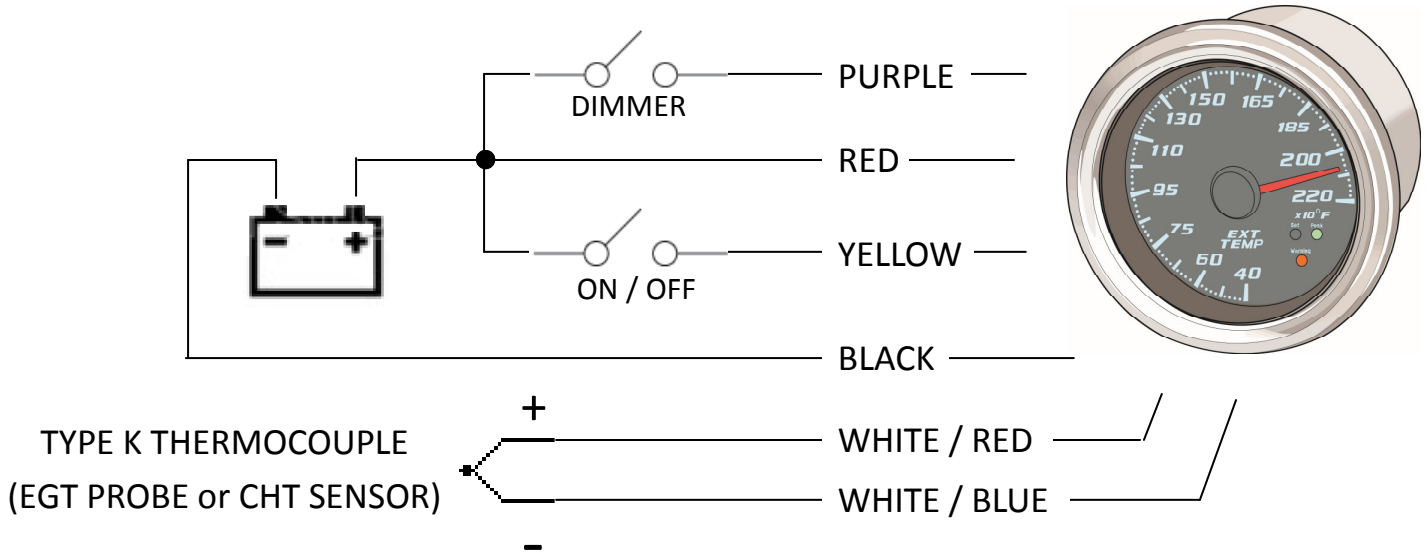
\*\*\* This wire must be connected to same source as Gauge Power Input (Red wire). You can use an On / OFF switch inline to turn gauge on & off. If this is not connected then the gauge will not power on.



Connector (Front View)

# Instruction Manual - APG Series Pyrometer

## Wiring Schematic:



## Wiring the Probe Connector:

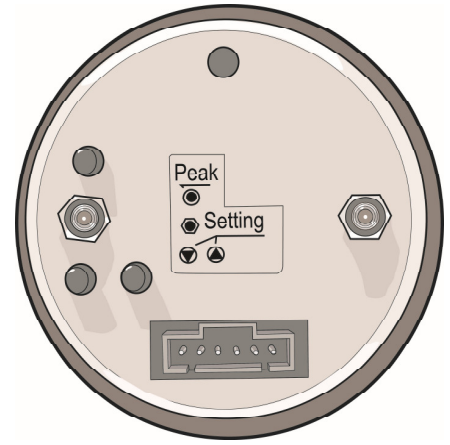
Use a Type K Thermocouple Mini Connector (with flat pins)  
 The Sensor Connection p/n: CON-MP-MINI-K



Type K Thermocouple International Color Codes:

Country Made:	USA & Canada*	Japan	Germany	British	France
(+) Positive Wire	YELLOW	RED	RED	BROWN	YELLOW
(-) Negative Wire	RED	WHITE	GREEN	BLUE	PURPLE

\* Note: All EGT and CHT sensors from The Sensor Connection follow USA color codes



## Peak Mode Functions:

Momentarily push the **PEAK** button to display the peak (highest) temperature value recorded. The Peak LED indicator light will remain lit alerting you that you are in Peak mode.

To clear the peak value memory, press and hold the **PEAK** button for 5 seconds. The Peak LED indicator light will flash 3 times.

(NOTE: The Peak value is erased & reset once the gauge is powered off)

(NOTE: The gauge returns from Peak mode to normal operating mode if no activity for 5 seconds)

## Warning Set-Point Mode Functions:

To adjust the Warning set-point, use the ↑ or ↓ keys to move the pointer to the desired temperature parameter.

Press the ↑ key to make the pointer move clockwise.

Press the ↓ key to make the pointer move counterclockwise.

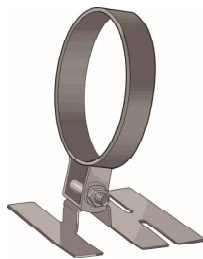
(NOTE: Holding down either key for more than 3 seconds will make the pointer move faster)

(NOTE: The gauge returns from Warning set-point mode to normal operating mode if no activity for 5 seconds)

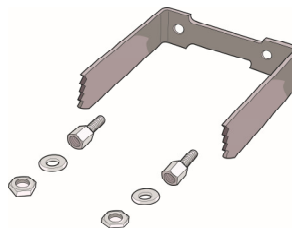
## Included Components:



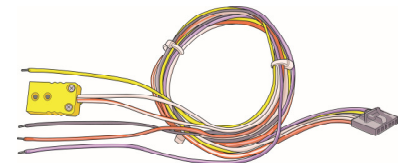
Gauge



Dash Mount  
Bracket



Panel Mount  
Bracket



Wiring  
Harness

# Instruction Manual - APG Series Pyrometer

## Danger

- Ensure that the vehicle will remain stationary and turn off the engine before installing this product. Failure to do so could result in a fire, and could make the vehicle move during installation.
- Remove the key from the ignition and disconnect the negative (-) battery terminal prior to installation of this product. Failure to do so could result in a fire caused by an electrical short circuit.
- Take care not to install this product in a way that interferes with safety equipment such as seat belts and air bag systems or vehicle operation equipment such as engine controls, steering wheel or brake systems. Interference with normal operation of the vehicle can result in an accident or fire.
- Solder or use a solderless connector for wiring connections and make sure connections are insulated. In areas where there could be tension or sudden impacts on the wiring, safeguard the wiring with corrugated tubing or other shock absorbent material. Accidental shorts can cause fires.

## Warning

- Carefully consider the installation location and driver's operation of the product before installation. Do not install the product where it interrupts driving and the safety devices of vehicle such as the air bag system. Be sure not to install the unit where it could fall. Improper installation or operation could cause the product to fall and damage the vehicle or cause serious danger by impeding driving.
- Do not disassemble or modify this product. Such actions can not only damage or destroy the product but will also void the warranty.
- Do not perform installation of this product immediately after the engine has been switched off. The engine and exhaust system are extremely hot at this time and can cause burns if touched.
- Ensure that the wiring of this product does not have an adverse impact on the other wiring of the vehicle. Any controlling devices or other electronic components of the vehicle could be damaged.
- Please keep children and infants away from the installation area. Children may swallow small parts or be injured in other ways.

## Caution

- Insulate any unused wires. If any wires or connectors loosen during installation, please make sure they are correctly reattached.
- Dropping any of the components of this product will result in damage to the product.
- Excessive force on switches/terminals may result in damage to the product.
- Use only the wires provided. If additional wires are required, use the same of quality and gauge wire as is provided with the kit.
- Do not attach wires on the body of the vehicle or engine parts as this may result in damage to the product.
- Install wires away from ignition and also radio signal frequency interference as this could cause the gauges to malfunction.
- Do not place wires near the engine, exhaust pipe or turbine. It may result in damage or fusion of wires.
- Make sure the waterproof processing is done when routing wires in the engine compartment.
- When installing the sensor, do not bend the wire near the sensor body.
- Wear gloves to avoid burns when soldering and cuts when working with wiring.
- Do not share a single fuse with multiple gauges. Every gauge requires an independent fuse.
- Install gauge away from hot or wet places.
- Do not pull the wires out of connectors forcefully. The connectors may be broken and the wires may be cut. When pulling out the wires, press the lock firmly and unclip the locks of connectors.

# Instruction Manual - APG Series Pyrometer

## 12 MONTH LIMITED WARRANTY

The Sensor Connection LLC (TSC) warrants to the consumer that all TSC products will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at TSC's option to the consumer, when it is determined by TSC that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the TSC instruments. In no event shall this warranty exceed the original purchase price of the TSC instruments nor shall TSC be responsible for special, incidental or consequential damages or costs incurred due to the failure of this product. Warranty claims to TSC must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. TSC disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured or supplied by TSC.

FOR SERVICE SEND TO:

**The Sensor Connection**

55 East Long Lake Road # 505, Troy, MI 48085 USA (248) 636-1515

email us at: [sales@thesensorconnection.com](mailto:sales@thesensorconnection.com)

[www.thesensorconnection.com](http://www.thesensorconnection.com)