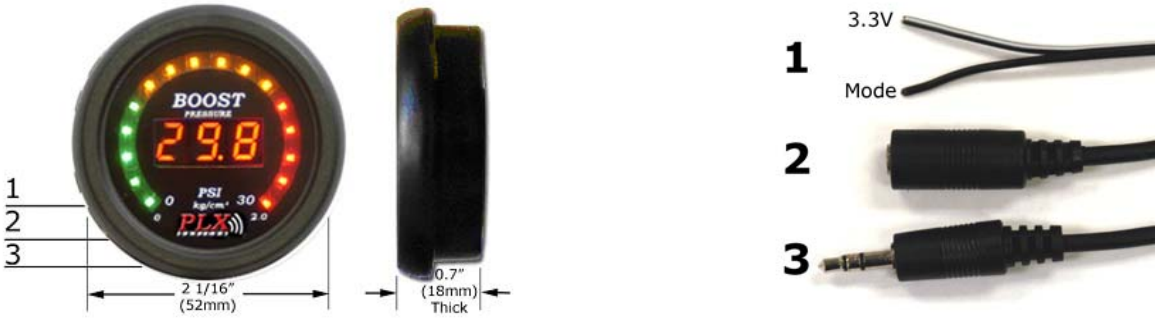
iMFD Display Module DM-5 Boost

Version 1.1 November 7, 2007

***Please read the instructions completely through at least once before proceeding with the installation to minimize errors.**

Overview:

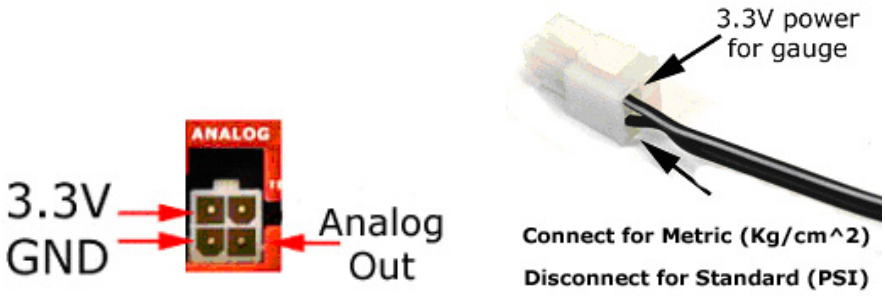


(Figure 1)

Three sets of wires come out of the DM-5 Boost

1. A pair of wires (black, and black with a white stripe)
    a. Black connects to ground for Metric, or left unconnected for Standard (PSI)
    b. Black/White Stripe connects to 3.3V power source on SM-Vac/Boost module
2. Female 3.5mm plug used for iMFD serial TX (Transmit) NOT NEEDED FOR STAND ALONE SETUP
3. Male 3.5mm plug used for iMFD serial RX (Receive)

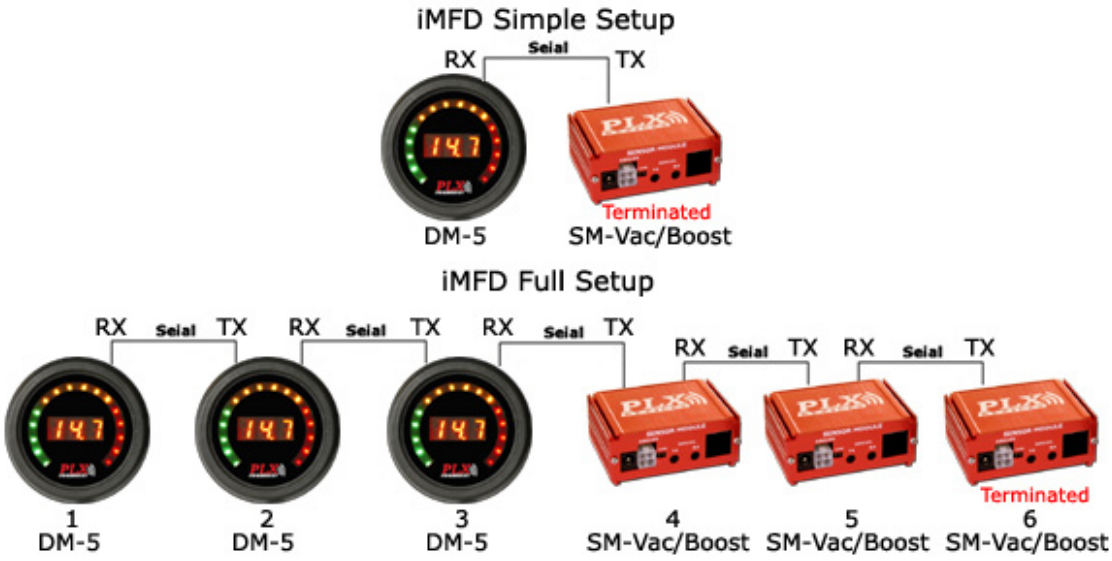
Connecting Power:



1. Use the included 4 pin connector and terminal to connect the Black/White Stripe wire to the “3.3V” location on your SM-Vac/Boost module. Solder or crimp the wire to the terminal to ensure good electrical continuity.
2. No connection to ground is necessary. Ground is automatically connected through the iMFD RX and TX connectors.
3. Power on the SM-Vac/Boost module and check if the DM-5 Boost lights up.

www.plxdevices.com
(408)745-7591

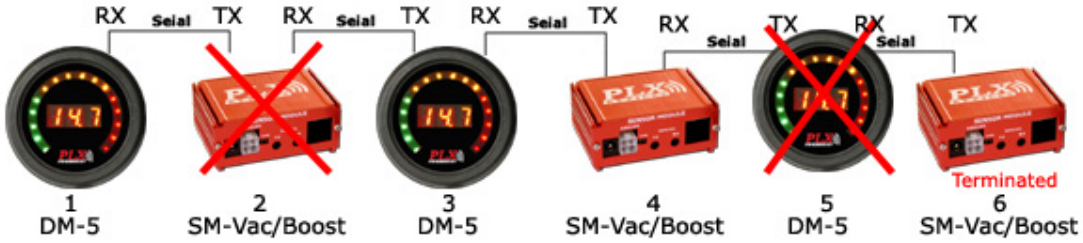
Using the Sensor Module in the iMFD Chain:



There are two recommended uses for the DM-5.

1. The simple setup connects to just one SM module. This is great for stand alone gauges. Connect the Male RX iMFD serial connector to the TX of the SM-Vac/Boost module
2. The complex setup is great for monitoring several SM modules simultaneously. Looking at the above diagram. The DM-5 Boost labeled (1) automatically displays the information from SM-Vac/Boost labeled (4). The DM-5 Boost labeled (2) automatically displays the information from SM-Vav/Boost labeled (5). The DM-5 Boost labeled (3) automatically displays the information from SM-Vac/Boost labeled (6) and so on.... The DM-5 automatically "knows" where to look for the information with respect to where it is connected in the iMFD chain.

This setup is incorrect and violates the iMFD daisy chain rules.
Placing a display Module upstream from a Sensor Module is incorrect.
Placing a Sensor Module downstream from a Display Module is incorrect.



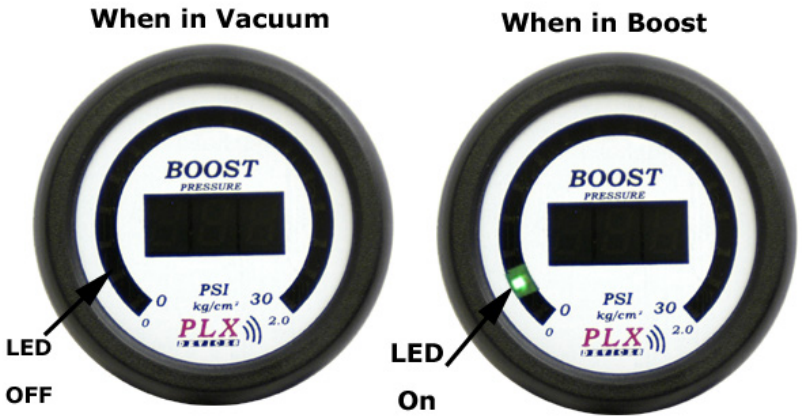
Setting the Gauge Mode:

The DM-5 Boost gauge has two modes of operation. Pounds/in^2 (PSI) or Kg/cm^2 can be displayed on the center 3 digit digital display.

1. Standard – PSI (pounds per square inch)
    a. Leave the solid black wire unconnected for PSI mode
2. Metric - Kg/cm^2 (Kilograms per centimeter square)

www.plxdevices.com
(408)745-7591

a. Connect the solid black wire to ground for Kg/cm^2. Ground is available on the SM-Vac/Boost.



In Standard Mode (PSI):

The DM-5 Boost in the Standard configuration has two modes of operation.

1. Boost
2. Vacuum

If the SM-Vac/Boost is reading vacuum, the DM-5 Boost gauge will display a vacuum reading inHg (inches of Mercury).

If the SM-Vac/Boost is reading boost, the DM-5 gauge will display a boost reading in PSI (pounds per square inch)

In Metric Mode (Kg/cm^2)

The DM-5 Boost in the Metric configuration has two modes of operation.

1. Boost
2. Vacuum

If the SM-Vac/Boost is reading vacuum, the DM-5 Boost gauge will display a vacuum reading mmHg (millimeters of Mercury).

If the SM-Vac/Boost is reading boost, the DM-5 gauge will display a boost reading Kg/cm^2 (Kilograms per centimeter square)

Included Items:

1. DM-5 52mm Gauge
2. 4 pin connector (white) for SM-Vac/Boost connectivity
3. 2 terminals for 4 pin connector
4. Users guide

Specifications:

Physical Dimensions	Standard 2 1/16" (52mm) x 0.7" (18mm)
Display Technology	LED (3 Digit center, 16 Green, Yellow, Red Bars)
Viewing Angle	180 Degrees
Polarization	None (Viewable with polarized sunglasses)
Supply Voltage	3.3V from SM Module
Power Consumption	0.25 Watts Typical

www.plxdevices.com
(408)745-7591

Cable Length	6ft (~2m)
Operating Temperature	0 - 85 Deg C

TERMS OF USE

PLX Devices Inc. does not guarantee the SM-Vac/Boost functionality with any ECU, data logger or other devices that uses the output signals. Implementation and integration of the SM-Vac/Boost with any other device(s) must be done at your own risk. Improper installation and usage may lead to engine damage. Mount and install the SM-Vac/Boost in a location where it does not obstruct the driver's view and/or ability to safely control the vehicle.

LIMITED WARRANTY

PLX Devices Inc. warrants this product to be free from defects for 1 year from the date of purchase. If applicable, Oxygen sensors and other non-serviceable items are excluded from stated warranty. Serviceable goods must be determined by PLX Devices to be defective before any warranty or replacement is issued. PLX Devices' obligation under warranty shall be limited to repairing or replacing, under the discretion of PLX Devices, any part proven defective. This warranty is limited to the repair or replacement of parts in the manufactured good and the necessary labor done to affect its repair or replacement.

SERVICE UNDER WARRANTY

In the unlikely event that your PLX Devices hardware should fail during the warranty period, a Return Material Authorization number (RMA) must be first retrieved from PLX Devices Customer Support. Support can be contacted through email: support@plxdevices.com or by phone: 408-745-7591. All serviceable goods must be packaged securely with proof of purchase, RMA number, with all shipping charges prepaid and shipped to PLX Devices Inc. Goods returned under warranty must be received by PLX Devices Inc. within ten (10) business days after the RMA number has been issued. Goods received after this period is subject to fees for the service of repair or replacement. All repaired or replaced items shall be warranted for the remainder of the original product warranty.

RETURNS AND RESTOCKING FEE

A 15% restocking fee will apply to applicable PLX Devices products for refund. All returns are to be packed in original condition including packaging, documentation, manuals, and accessories. Returns that do not include all the accessories and components may be returned to the customer or charged on a per item basis. The customer assumes responsibility for product until receipt at PLX Devices Inc., shipping via an insurable carrier is recommended. Any unauthorized shipping charges will be billed to the customer or shipment will be refused.

DISCLAIMER

PLX Devices Inc. shall not be liable for direct, special, incidental, or consequential damages resulting from any legal theory including, but not limited to, lost profits, downtime, goodwill, damage, injury to persons, or replacement of equipment and property due to improper installation, integration and/or misuse of any PLX Devices Inc.'s product(s). This warranty applies to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 90 day warranty period.

Revision History

Version 1.0 (9/4/07)	Initial release
Version 1.1 (11/7/07)	Updated image for connection diagrams, updated warranty policy