

Power Draw = 0.2 Amp
3A to 5A Inline Fuse Recommended
for +12 Keyed Ignition

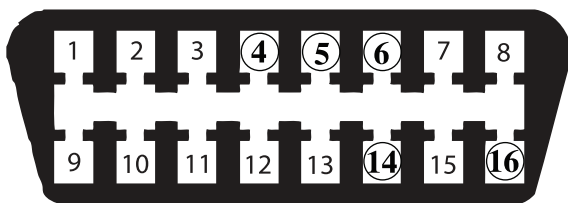
1. Disconnect negative (-) battery cable
 2. Hook up power requirements as shown in **Figure 1**.
 3. Daisy Chain the gauges together (Gauges can be daisy chained in any order. See **Figure 1**)
 4. Connect the chain of gauges to the OBDII wiring using the OBDII connector or wire it direct to *CAN high* and *CAN low* ECU lines.
- CAUTION:** Do not connect the Daisy Chain while connected to a powered OBDII system. Failure to do so will throw a check engine code.
- Wire Direct Note:** Speedhut Freedom CAN-BUS gauges (individual or daisy chained) will not function when used in conjunction with any other OBDII device.
Cycle the gauge power to restore proper gauge function.
5. Mount gauge(s) for easy viewing. Use spin lock ring (included) to mount to panel.
 6. Reconnect negative (-) battery cable.

CAUTION: Do not connect the Daisy Chain while connected to a powered OBDII system. Failure to do so will throw a check engine code.

Figure 1: OBDII and Daisy Chain Setup



Does your vehicle support the CAN-BUS protocol?



Vehicle's OBDII connector pin numbering

OBDII CAN (J1979) protocol Pinout:

If the vehicle has wires that connect to pins 6 and 14 of the OBDII connector then the vehicle supports the CAN-BUS (J1979) protocol.

Pin 4 -- Chassis Ground

Pin 5 -- Signal Ground

Pin 6 -- CAN High (data)

Pin 14 -- CAN Low (data)

Pin 16 -- +12volt Battery power (not for use as gauge power)

Setting warning LED for both low and high.

LED can be set to turn on for both a low or high condition, or turned off in either/both case(s).

To reset LED set point at any time follow this procedure again.

1. To enter LED calibration mode, Press and hold LED button with gauge power off. Turn on gauge power. Release button.
2. Pointer will slowly scan clockwise from full low condition on dial. Press button at desired low warning set point. LED will blink to indicate low warning has been set. **Note: Pressing button at full low (6 o'clock position) on dial will turn off Lean LED warning so that it does not light up.**
3. Pointer will now travel to full high condition on dial and slowly scan counterclockwise. Press button at desired set point for high condition. LED will blink to indicate high warning has been set. **Note: Pressing button at max high position on dial will turn off high LED warning so that it does not light up.**

Note: Setting a low warning will turn on LED when pointer travels below the low set point. Setting a high warning will turn on LED above the high set point.

Setting LED brightness both day and night.

At any time while gauge is running, press and release LED button to show current LED brightness. After a couple second delay, if button is not pressed this current setting is re-saved. LED will blink to indicate setting has been saved. To change LED brightness press and release the button to advance to next higher brightness level. LED brightness will loop through 5 possible brightness settings including off as you press and release the button. At acceptable brightness level do not press button for couple second delay. LED will blink to indicate setting has been saved.

Note: Setting the brightness level when gauge lighting is on, will set the night brightness level. Setting the brightness level when gauge lighting is off will set the day brightness level.

Peak recall memory (not available on Fuel Level Gauge)

Press and hold gauge button down and gauge needle will move between low and high peak. Gauge will continue toggling between low and high peaks as long as button is pressed. **Note: low peak becomes active once gauge needle travels up at least 1/8 scale initially. Once this condition occurs low peak becomes active and will record the lowest reading the gauge achieves.**

To retain peak reading (NOT CLEAR IT)

While showing peak reading, release button, wait 5 seconds, gauge will return to normal and retain the peak reading.

To clear peak reading

While showing peak reading, release button, and immediately press and release again within 5 seconds. LED will flash 2 times and pointer will travel to zero to indicate peak has been cleared.

Setting low fuel warning LED (Fuel Level Gauge Features)

LED can be set to turn on for a low fuel condition.

To reset LED set point at any time follow this procedure again.

1. To enter LED calibration mode, Press and hold LED button with gauge power off. Turn on gauge power. Release button.
2. Pointer will slowly scan clockwise from Empty condition on dial. Press button at desired low fuel warning set point. LED will blink to indicate low warning has been set. **Note: Pressing button at full empty position on dial will turn off low LED warning so that it does not light up.**

