

# Installation Instructions for 3-3/8" Tachometer

## Before You Start

- Read instructions completely before installing.
- ALWAYS WEAR SAFETY GLASSES.
- Install gauge only when engine is cool and ignition is off.
- Make sure all necessary tools, materials, and parts are on hand.
- Disconnect negative (-) battery cable before installing gauge.

## Tachometer Signal Hookup

This performance tachometer has two signal input options (SIG 1 & SIG 2). See Fig 1. Signal Hookup. Choose the option best suited for your vehicle's ignition system. **Only connect 1 signal input.** If you are unsure which signal input to use, connect your signal source to SIG 1.

**NEVER CONNECT SIGNAL WIRE TO THE COIL WHEN USING AN MSD OR SIMILAR HIGH OUTPUT CAPACITIVE DISCHARGE STYLE IGNITION SYSTEM.** Incorrect installation will damage the tachometer and the warranty will be voided.

## General Information

12-volt DC negative (-) ground electrical systems.

## Calibration

Calibration of the tachometer is done via dipswitches in the back of the gauge. There are 3 dipswitches, each of which can be set to OFF (down) or ON (up). See Fig 1 for dipswitch settings.

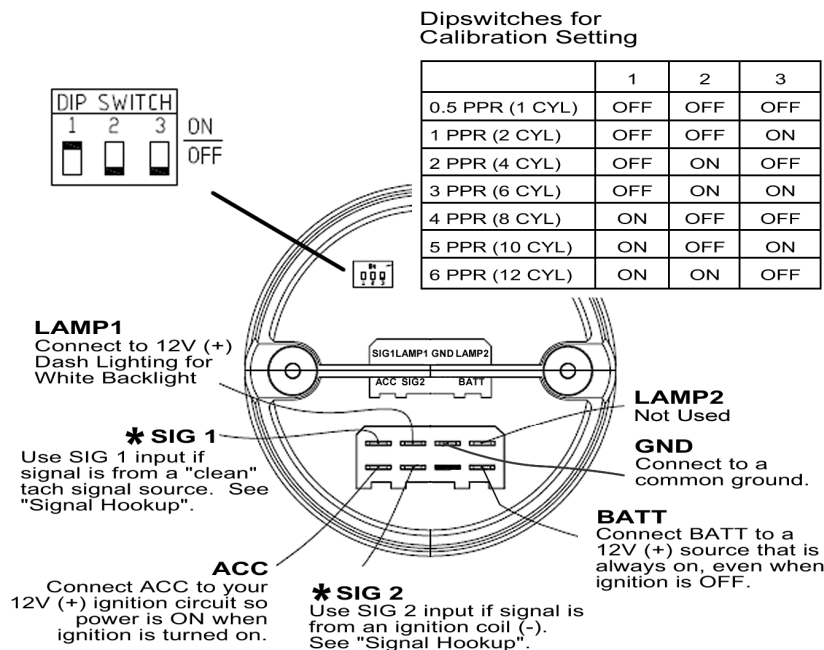
## Dimmable LED Lighting

This gauge features through-dial, high-definition LED lighting that will not dim when used with standard dash dimmers. A dimmer switch specifically designed for use with this gauge is available separately.

## Wiring

Use 20 AWG stranded or heavier wire for installation. Route wires away from any moving parts and hot engine components. Secure wires firmly along their route. **Note:** As a safety precaution, the ACC and 12V+ connections should be fused. We recommend using a 1 Amp, 3 AG fast-acting type cartridge fuse.

Fig 1. Wiring Diagram



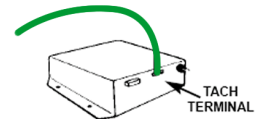
## SIGNAL HOOKUP

Determine which SIGNAL input to use (**SIG 1 or SIG 2**). **Only connect ONE signal input.** If you are unsure which SIGNAL input to use connect your signal source to SIG 1.

### "Clean" Tach Signal

Connect the signal wire from the signal source to SIG 1 if you are using a tach signal from any of the following: ignition with tach output terminal, ECU, tach adapter, other "clean" tach signal source

CONNECT TO SIG 1



### Ignition Coil (-)

if you are using a signal from an ignition coil (-), connect the signal wire from the coil negative (-) to SIG 2.

CONNECT TO SIG 2



## Tachometer Signal Hookup (Additional Info)

This tachometer has two signal input options. **Only connect 1 signal input.** If you are unsure which signal input to use, connect your signal source to **SIG 1**.

### SIG 1: "Clean" Signal

On applications where a "clean" tachometer signal output is available (typically a 12V square wave signal) connect the signal source to **SIG 1**. Applications with "clean" tachometer output signals include ignition boxes with tachometer output terminal, dedicated tachometer signal from ECU, and tachometer adapters.

### SIG 2: Ignition Coil (-) & HEI with Tach Output

On standard ignition coils connect the signal wire from the coil negative (-) to **SIG 2** on the back of the tachometer. On HEI ignitions with tachometer output: connect the signal wire from the HEI Tach output terminal to **SIG 2** on the back of the tachometer. **Note:** Some ignition coil applications (including many 4 cylinder applications) output a relatively clean signal. If this is the case for your application you may need to use the **SIG 1** input.

### No Signal or Noisy Signal?

- Verify you have a good common ground.
- Verify you have a good signal connection.
- Verify your signal amplitude is at least 8V (i.e. 5V signal will not drive the tachometer).
- Try switching input signal wires (i.e. try SIG 1 if you are using SIG 2 input).

For extreme cases of noisy signals you may need to install a Tachometer Filter (Marshall Instruments Item # 9219).