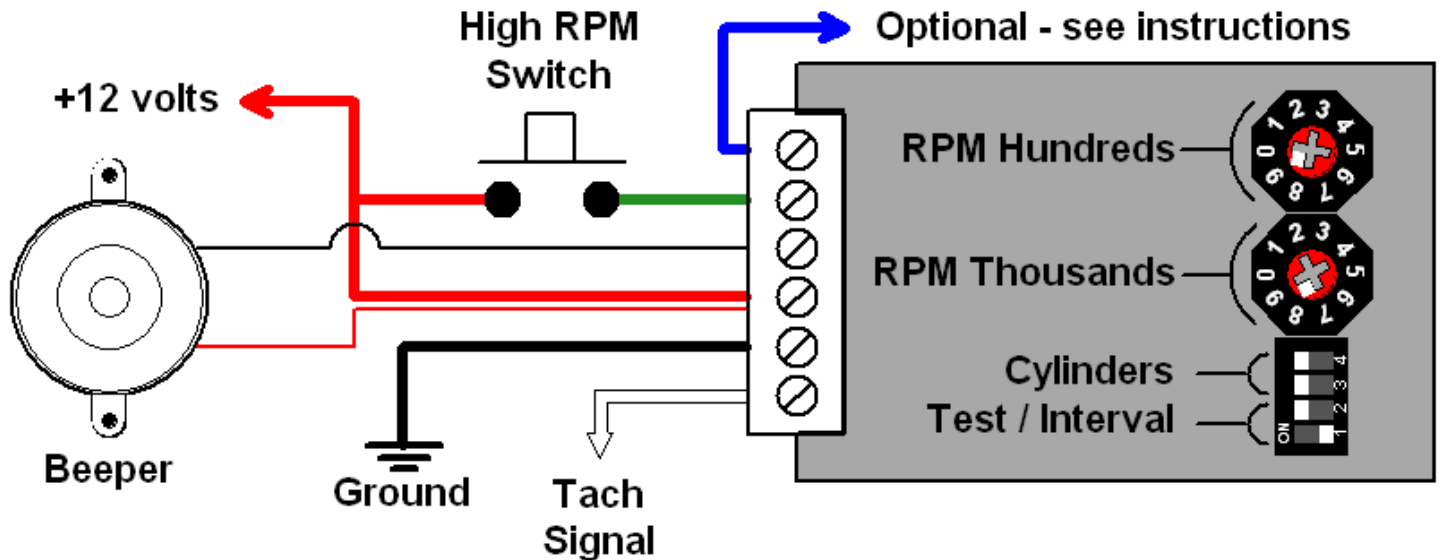


Wiring Diagram

Description of Required Connections

- Black – Ground
- Red – +12 volts accessory or ignition power and beeper positive
- White – Tachometer signal
- Black – Beeper negative (output from module)



Optional Connections

Green Wire - High RPM Playback using a Dedicated Switch – Connect to an external switch to allow the playback of the highest RPM recorded by the Redline module (see operation section for more details). The above diagram shows the standard installation using a normally-open momentary switch (spring-loaded push-button) connected to +12v.

Blue Wire - Instant Playback Feature – version 1.8 and above only

When using a dedicated switch for High RPM Playback (as above), connect the blue wire to ground. This eliminates the 10-second delay that is needed when using a factory control for High RPM Playback.

High RPM Playback connected to factory control - (Adaptive Input Feature, version 1.8 and above)

Use this method if you do not want to install a dedicated external switch for High RPM Playback.

In order to make the High RPM Playback even easier to install and use we have added an “Adaptive Input” feature that allows the High RPM Playback wire (green) to be connected to an existing factory control, such as a High Beam “flash to pass” or Cruise Control “Set” or “Resume” button. You may use almost any factory control that has a momentary switch as long as you would not normally press the switch for more than 10 seconds. Almost any switch that provides either a positive or a negative trigger will work. A positive trigger is a switch that provides a positive voltage when the switch is activated. An example could be a “high beam flash” switch that activates the high beam relay by switching +12v to the relay coil. A negative trigger is just the opposite – it provides a ground to the circuit or relay in order to activate it.

The Redline module can use either of these switch types and will automatically configure itself as needed. On power-up, the module waits 5 seconds, and then it senses the voltage on the green wire. If it does not see +12v it configures itself to expect a +12v trigger to activate High RPM Playback. If it does see +12v it will re-configure itself to use a ground trigger. This allows the High RPM Playback feature to be used in almost any vehicle without the need for a separate switch.

To use this feature, locate the wire on your chosen factory control that changes from ground to +12v or from +12v to ground when the switch is pressed. Install a T-tap on this wire and connect it to the Redline module green wire. Also, be sure to leave the Redline blue wire unconnected (insulate it) so the 10 second delay is functional. That way, normal use of the factory control will not start the High RPM Playback; it will only play back if you hold the button for 10 seconds.

Switch Settings

Shift RPM - The rotary switches allow you to set the Shift RPM in 100 RPM increments. For switch settings between 3-0 and 9-9 the switch setting is the actual RPM. For example, 5-5 would be 5500 RPM; 8-9 (shown below) would be 8,900. However, for switch settings between 0-0 and 2-9 you add 10,000 RPM to the switch setting. This extends the range of the Redline module to 12,900 RPM without the need to add another switch. For example, if you wanted a Shift RPM of 10,000, set the switches to 0-0 (zero + 10,000 = 10,000). For a Shift RPM of 12,500 set the switches to 2-5 (2500 + 10,000 = 12,500). **Note** – Adjust the rotary switches so the “white diamond” points to the number you want.

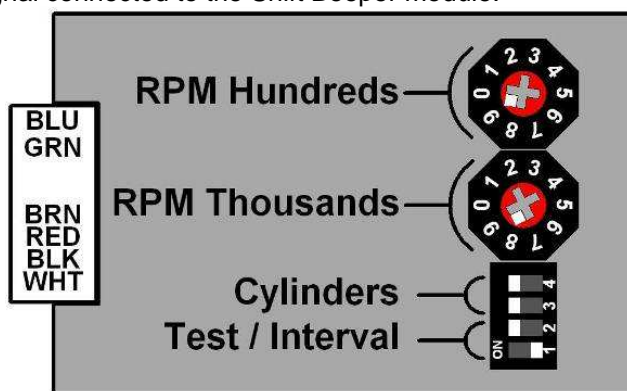
Interval - This setting defines how far apart the “Pacing Beeps” are set. For most applications 200 RPM seems to work but you’re free to experiment and see what you like best. As shown below, this Redline module is set for an Interval of 200 RPM, 4 cylinders, and a Shift RPM of 8,900. This means the module will give a quick beep at 8300, 8500, and 8700 RPM, followed by a continuous tone at 8900 RPM.

Test Mode – This feature is available on versions 2.1 and above. Setting switches 1 & 2 ON activates the test mode and causes the beeper to beep once a second at idle rpm (800 rpm). The beeping will speed up as the engine RPM increases so this is an excellent way to verify you have a good tach signal connected to the Shift Beeper module.

Interval RPM		Cylinders	
Switch # →	1 2	3 4 ←	Switch #
Test Mode	↑ ↑	↑ ↑	4 Cylinders
100 RPM	↑ ↓	↓ ↓	5 Cyl / VIPER
200 RPM	↓ ↑	↑ ↓	6 Cylinders
300 RPM	↓ ↓	↓ ↑	8 Cylinders

↑ = dip switch up (ON)

↓ = dip switch down (OFF)



Operation

Shift Beeper function - The Shift Beeper provides 3 equally spaced “pacing” beeps, followed by a steady beep to indicate your shift point. The steady beep occurs exactly at your Shift RPM, which is programmed by you on the rotary switches. The pacing beeps occur at intervals of 100, 200 or 300 rpm (again, set with the switches) and occur prior to the Shift RPM. The pacing beeps are equally-spaced so it’s easy to judge when that crucial “4th beep” will occur and time your shift exactly at redline. Simply count “one, two, three, shift” and with a little practice you’ll find yourself comfortably winding every gear to redline while never taking your eyes off the road.

High RPM Memory - The module remembers the highest rpm the engine reaches, and will ‘play it back’ by beeping the sounder. The playback is initiated by pressing a separately wired button or may be connected to a factory control such as a Cruise Control button (see instructions on page 1). Unless erased by you, the High RPM is retained in memory virtually forever, even if power is disconnected. This function is useful for ‘Dealer Service’ or ‘Valet’ occasions when you want to know how your car has been treated. Remember to reset the High RPM before leaving your car for service or Valet.

To initiate playback – Press and release the High RPM Playback switch (or hold it for 10 seconds then release if using a factory control) and the Redline module will begin beeping. Be prepared to start counting the beeps. It will beep once for each thousand RPM, then pause, then beep once for each hundred RPM. A high RPM of 7200 would play back as “7 beeps, pause, 2 beeps”. The module will also play a short beep to indicate a zero. For example, if the high RPM was 7,000, it would play back “7 beeps, pause, 1 short beep”. **Note** – The High RPM playback “rounds” the RPM to the nearest 100 RPM. For example, if your Shift RPM is set to 5800 and when driving you never quite revved it high enough to hear the “steady beep” you know you didn’t hit 5800. But if it plays back 5-8 (5800) you know that you hit at least 5750 RPM. So in these cases the module is actually providing an RPM playback precision to within 50 RPM.

To reset the High RPM – During playback of the High RPM or within 5 seconds of when playback stops, press and release the switch again. Once the High RPM playback is complete the module will pause, then give 4 quick beeps to confirm the high RPM is reset. If the engine is not running it will reset to zero (short beep, pause, short beep), otherwise it will immediately capture the current engine RPM and store it as the new High RPM.