

## The fire in your ATV

## VDI Copperhead® GEN2 CDI



The Copperhead<sup>®</sup> GEN2 is the world's most advanced and expandable Capacitance Discharge Ignition (CDI). The Copperhead<sup>®</sup> CDI was designed around our DPM-550 Copperhead<sup>®</sup> core for ease of use and maximum flexibility while providing years of trouble free service. Each Copperhead<sup>®</sup> is shipped with a machine specific harness to be used right out of the box, and requires no additional configuration. Additional harnesses sold separately to allow for the unit to be installed on other supported models.

Several of the key features are:

- Plug and play installation allows for quick installation, with no wiring modifications to the machine.
- Dual timing maps and configurations. Have one map for inexperienced riders, and one performance map to unleash the power of your machine. Both maps are fully configurable via our optional USB Memory Interface
- Repetitive fire ignition delivers hotter spark with longer spark duration for maximum power and virtually eliminates misfires, while giving you easy starts and crisp throttle response.
- Using the performance map allows the machine to run cooler, produce more horsepower and more torque, while minimizing fuel consumption. Also, you'll benefit from better throttle response.
- Expansion port for a future Electronic Fuel Injection (EFI) upgrade.
- Replaceable harness allows for platform changes with a simple harness change and a firmware upgrade using our USB Memory Interface (sold separately). This may be the last CDI you'll ever need to buy!

Supported Machines:

- 2002+ Kawasaki Prairie/KVF/Brute Force 650/700/750
- 2008 Kawasaki Teryx 750
- 2004+ Kawasaki V-Force 700
- 2004+ Arctic Cat V2 650 / 2004+ Suzuki Twin Peaks 700
- 2002+ Yamaha Grizzly 660 / 2004+ Yamaha Rhino 660

Telephone: (403) 668-7470 Facsimile: (403) 668-7471 Webpage: <u>www.velocitydevices.com</u> Email: sales@velocitydevices.com



## **Features:**

The Copperhead<sup>®</sup> CDI is shipped with map #1 set to an "original type configuration" which is very similar to the stock CDI. Map #2 is shipped with a performance type configuration for 87-octane fuel, which raises the revolution limiter, and disables the reverse and forward speed limiters.

Both maps and configurations can be changed using USB Memory Interface (available separately).

In addition, the Copperhead<sup>®</sup> CDI comes equipped with six (6) optional connections:

- 1) Engine kill tether switch connection. Active high input.
- 2) Tachometer output interfaces to off the shelf, 12V input tachometers that require one (1) pulse per revolution.
- 3) Four (4) configurable outputs to control shift lights, NOS controllers, or any other RPM sensitive outputs. Requires optional USB Memory Interface for configuration.

The Copperhead<sup>®</sup> CDI indicates system failures by displaying error codes on the belt light (Kawasaki -if available), or reverse light (Yamaha) as well as the integrated status LED.

The Copperhead<sup>®</sup> CDI can be installed on different machines with a simple wiring harness change (available separately) and a firmware upgrade via the USB Memory Interface (available separately).

## Specifications:

Subject to change without notice. Dimensions (without wiring harness) (LxWXH): 145mm x 115mm x 42mm Weight: 500 grams Input Voltage: 5 VDC to 20 VDC (minimum of 9 VDC required to start) Input Current (engine not running): 330mA RMS @ 25°C Input Current (engine running): 1.7A RMS @ 25°C Output Voltage (to coil): +/- 170 V Peak Output Energy (per coil): 14.5 mJ Firing Duration: 15 degrees via Multi-Spark Discharge Operating Temperature: -55°C to +100°C Maximum engine speed: 12000 RPM Maximum advance: 50 degrees BTDC @ 8000 RPM, with software roll off to 46 degrees BTDC@ 12000 RPM

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