

AUTRONIC 500R CDI

- 4 Channel direct fire Capacitor Discharge Ignition system
- 2 Channel simultaneous discharge
- 2 Power settings
- Second spark capable
- Tacho output



Order: 500R CDI or 500R Kit that includes CDI,
 Connector set with pins & seals

AUTRONIC 500R CDI Configuration overview

| Feature | Configuration (for HF suffix serial numbers) |
|---|--|
| 4 Output channels | Direct fire non-waste spark on up to 4 cylinder engines Direct fire on 2 rotor rotary engines Waste spark fire on up to 8 cylinder engines (4-stroke only) |
| 2 Internal ignition units for simultaneous or split triggering of two output channels | Twin spark plug per cylinder engines or rotary engines Split timing between plugs in same cylinder or rotor |
| Two output power levels selectable by either switch or ECU control | Low power 1 st spark - 100 mJ High power 1 st spark - 125 mJ |
| Second spark for low RPM | Second spark capability (RPM/Simultaneous/Split dependent) Can be inhibited by trigger signal pulse time if required |
| Triggering by -ve (negative) signal edge | Same triggering as most conventional transistor type ignition modules |
| Tacho output | 12v square wave for electronic tachometers |
| EMC compatibility (C-Tick compliant) | Shielded / twisted cables NOT required for installation |

AUTRONIC 500R CDI Detailed Specifications

| | | |
|--|--|--|
| Double Spark Mode Output Voltage & Energy per spark @ 13.8v minimum supply voltage (HF version) Note: Double spark mode not permitted above 733Hz (8cyl @ 11000 RPM) | 1st spark (High power setting) | 500 volts, 125 mJ to 480Hz (8cyl @ 7200 RPM) |
| | 1st spark (Low power setting) | 450 volts, 100 mJ to 570Hz (8cyl @ 8500 RPM) |
| | 2nd spark (Both settings) | 350 volts, 60 mJ |
| Single Spark Mode Output Voltage & Energy per spark (Max RPM) @ 13.8v minimum supply voltage (HF version) | High power setting | 500 volts, 125 mJ to 800Hz (8cyl @ 12000 RPM) |
| | Low power setting | 450 volts, 100 mJ to 1KHz (8cyl @ 15000 RPM) |
| | Both settings | 350 volts, > 60 mJ to 1.5KHz (8cyl @ 22500 RPM) |
| 2nd spark delay @ 13.8v minimum (HF version) | | 0.65 msec after 1 st spark (typical) |
| Primary side voltage rise time | | 0.22 usec (typical) |
| Trigger Inputs (Passive pull-up type. Compatible with open collector and push-pull output types) | Input low threshold voltage Input high threshold voltage Input low current Survival limit | < 1.7 volts > 2.7 volts > -13 mA +/- 24 volts (< 5 minutes) +/- 300 volts (< 10 uSEC) |
| Tachometer O/P pulse width | | 0.72 mSEC (approx) |
| Power Supply - Voltage | Operational limits (including start-up) Survival limits | 6.3 to 20 volts DC continuous 12 volts DC minimum required for operation up to 670Hz (Double spark), 1340Hz (Single spark) +/- 23 volts (< 5 minutes) Outside +/-23 volt limits: > 60 A (Load dump < 20 mSEC) > 70 A (Inductive surge < 1 mSEC) < -10 A (Inductive surge < 100 uSEC) |
| Power Supply - Current | Off Engine stopped At maximum spark rate | < 10 uA < 200 mA < 13 Amp |
| Operating temperature range | Limits | -25 deg C to +85 deg C |
| Storage temperature range | Limits | -25 deg C to +105 deg C |
| Dimensions | Case | 180 * 140 * 50mm |
| | Overall | 200 * 140 * 50mm |
| Weight | | 0.75 kg |
| Connector | | 18 way splash & dust proof |