

Coils

The unit is compatible with the original coils and ballast resistor setup. Do not attempt to run with coils specifically designed for CDI ignition as their primary resistance is too low. You will get a very weak spark and risk overheating the coils and possible damage to the unit.

Operation

Cold Start

Ignition timing is locked on full advance and engine temperature is constantly monitored by way of the thermistor input. The machine may be ridden off immediately after a cold start if so desired, although it is good practice to warm-up for a short period. When approximately 60°C is reached, the advance lock is removed. If the engine should be idling at this point, the RPM will drop noticeably and the engine will smooth out. If the machine is cruising, then the rider will notice no change.

Warm start

On initial cranking, the unit sets full advance for twenty-five revolutions then reverts to normal operation. This action has been found to promote easy starting.

When running between 1000 and 2000 RPM, the unit calculates required spark advance each revolution. Above 2000RPM, advance is locked full.

A revolution limiter will operate if engine RPM exceeds 9500RPM. The limiter works by introducing full retard until engine speed drops back to a safe level.

Running without a thermistor

Connect the two blue/black leads together. The unit will now think that the engine is always warm.

Specifications

Case sealing	IP56
Absolute max ambient temperature	70 degrees Celsius
Advance curve	Linear
Advance commences	1000RPM
Advance ends	2000RPM
Revolution limiter	9500RPM
Maximum coil current	8A continuous, each channel
Thermistor trip-point	approx. 60 degrees Celsius
Supply voltage	5 to 20V, reverse polarity protected.
Setpoint accuracy	+ / - 2%

In the interests of product improvement, specifications and features may change without notice.