

Nemesis ECU by Competition Systems

- Biscaya Motor -

Principal features:

- 100% compatible with the standard bike dash, all CAN communications are supported.
- Air pressure and air temperature received via CAN from the standard dash
- Programmable flat switch input direct to the ECU
- Tilt switch input for race bikes
- All standard switch inputs for clutch, side stand, neutral supported
- Fan controls for overheat, same as standard
- 2 maps for race & road, toggled by pressing the start button after the engine is running – Dash will indicate the map change. (note: This function removes the possibility of triggering the lap time by pressing the starter button, this feature can be re-instated by fitting either a push button switch or an external infra red system to the existing bike connector)
- Option to change tyre circumference
- 2 programmable shift lights
- Programmable rev limiter, with dash warning to indicate 'rev limiter activated'
- Fuel & spark advance correction against speed to adjust for air box pressure.
- Closed loop fuelling correction to make mapping extremely quick, simply plug in and calibrate your external wide band lambda then define a 'target' AFR value, when 'on-cell' the ECU will self adjust.
- Stored diagnostics on inputs
- High speed 1mbps CAN link to an external logger.
- Idle air valve control - 1098

Your Nemesis ECU is able to adjust all of the following parameters:

- Injector 'dead time' table (time to open the injector at differing battery voltages) This allows you to change injectors
- Coil dwell table for users who wish to change coils
- On/off selection for the 'tilt switch' input
- Full access to the throttle calibration and breakpoint selection
- RPM breakpoint selection
- Full access to the wide band lambda calibration and breakpoint selection (16 points)
- Pre-injection time – mSec of injector open duration at power on to prime the cylinders
- Fuel pump timer strategy
- Tilt switch strategy
- Over run fuel / spark strategy
Temperature activation threshold for left and right cooling fan
- Professional 'flat shift' strategy
- Tyre circumference & trigger teeth calibration
- Rev limiters for spark and fuel (no limitations)
- Advanced transient strategy for fuel and spark advance with full user control

- Advance correction tables for air temp / water temp / horizontal and vertical cylinder / air pressure
- Injection correction for tables for air temp / water temp / air pressure
- Injection phase angle table plotted against RPM
- Horizontal cylinder injection table in mSec with 32 x RPM and 20 x Throttle breakpoints
- Vertical cylinder injection table in mSec with 32 x RPM and 20 x Throttle breakpoints
- Spark advance table in degrees with 32 x RPM and 20 x Throttle breakpoints
- Injection correction table as a function of speed with 32 x speed and 20 x Throttle breakpoints
- Advance correction table as a function of speed with 32 x speed and 20 x Throttle breakpoints
- Cranking correction (cold start map) with 32 x engine rotation and 20 x temperature breakpoints
- Your map may be loaded into map 1 or map 2 positions when you upload to the ECU, so the entire map may be different not just a trim.
- Target RPM value for cold start and normal running

Engine builder features:

- Accumulated mileage calculated from the speed input
- Total engine running minutes
- Total engine hours/minutes above 70% throttle
- Total engine hours/minutes above 9000rpm
- Maximum RPM
- Total number of times the engine exceeds your chosen speed limit
- Password locking of your maps within the ECU so that customers cannot see or make changes to your settings. They can however connect to the ECU to monitor any diagnostics.

Your Nemesis dealer in Sweden:

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