

## **PRODUCT DESCRIPTION KNOCK1 PNP PROCESSOR MODULE**

	Our affordable combustion knock control add-on
	for SM4 wire-in and SM4 based plug-in ECUs
o -	features modern DSP (Digital Signal Processor)
	technology that offers amazing performance
	from surprisingly simple hardware. Its high
0 -	performance DSP technology adds versatility to
	all aspects of the combustion knock detection
	process.
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	This product is a true cylinder by cylinder knock
	control system. Its capability extends to multi-
2-1	band, simultaneous multi-cylinder analysis with
	agile rpm and crank angle dependant adaption of
	both signal capture window and selective filter
-	frequency for up to 8 cylinder applications using
	a single sensor.
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	Complex diagnostic functions support failsafe
	and limp-home strategies for various abnormal
-	conditions including poor signal quality, sensor or
	sensor wiring failure.
o -	Built in cylinder by cylinder adaptability allows this product to be programmed with calibrations that suit whole
	engine families not just a particular engine. Interchangeability is similar to OEM ECU knock systems.
0-	Use this module to develop optimal ignition timing maps. Allow it to perform closed loop ignition timing for full
	load knock limited engine operation that produces maximum engine output under all operating conditions.
	Initial release of this product is preprogrammed modules to suit specific engine types. Since they require no user
2-	calibration, these units do away with the laborious selection of signal filter selection, detection window angles and
	sensitivity calibration maps. Routine engine changes can be made without making any adjustment to the Knock
	Processor Module or ECU.
	The types listed below are available as the initial product launch, other applications will be made available given
-	sufficient market demand.
	SUBARU WRX 2001 to 2005 fitted with OEM pistons or aftermarket forged pistons. Suitable for 2.0 and 2.5
-	litre variants. (Must be used in conjunction with Autronic WRX 01-05 Plug-in ECU)
	MITSUBSHI EVO IX. (Must be used in conjunction with Autronic EVO IX Plug-in ECU)
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24	<b>!!!</b> WARNING <b>!!!</b> This module is designed to limit knocking intensity and repetition. It cannot totally eliminate
1	knocking. DO NOT APPLY to engine types that cannot endure light intensity knocking under high load operation.