

MaxxECU GEN2 SPORT quickstart guide & wiring

(2026-10-05 - REV2 harness)

Online help!
maxxecu.com/support



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Wirings | Documentation | Guidance | Support

MaxxECU GEN2 SPORT - Compliance, Warranty & Safety

MaxxECU GEN2 SPORT is covered by a 36-month warranty against manufacturing defects within the EU/EEA, provided that installation has been carried out professionally by a qualified installer.
The product is intended for motorsport use, not for public roads, and use is at the customer's own risk with limited liability for consequential damages.

- Warranty: 36 months warranty against manufacturing defects. Requires proof of purchase from an authorized dealer and professional installation.
- Safety: Requires professional installation with proper engine grounding and disconnection of outputs during firmware updates, etc.
- Limitation of liability: The product is exclusively for competition vehicles (not for public roads), and all modifications are carried out at the customer's own risk.
- Compliance: CE marked according to EU directives (EMC, radio, RoHS) and must be disposed of as electronic waste (WEEE).
- Do not make any changes to the ECU hardware unless approved by us. Doing so may void CE/FCC compliance.

Manufacturer & product
Maxxtuning AB (MaxxECU), Gästgivaregatan 17, 576 96 Vrigstad, Sweden. Organisation number: 556740-1319.
Product: MaxxECU GEN2 SPORT - Engine Management System (ECU), Product ID 2538. Serial number marked on the unit.

Warranty terms and warranty limitations
MaxxECU products are warranted against defects in material or workmanship for 36 months from the date of purchase for customers within the EU/EEA. Proof of purchase from an authorised dealer is required.
Defective units will be repaired or replaced if returned with valid proof of purchase.
To the extent permitted by law, the foregoing is exclusive and replaces all other warranties or representations, whether express or implied, including any implied warranty of merchantability or fitness.

Warranty scope and limitations (warranty limitations)
The commercial product warranty covers only original manufacturing and material defects. The warranty does NOT cover faults, damage or consequential damage to the product or the vehicle caused by:
- Incorrect, deficient or non-professional installation.
- Failure to follow the accompanying technical installation instructions.
- Incorrect configuration, programming or electrical overload at the time of installation.
- For any warranty claim, MaxxECU reserves the right to request a copy of the installation receipt, a certificate/documentation from a professional party demonstrating that the installation was carried out correctly in accordance with our instructions.
- MaxxECU or its associates shall never be liable for special or consequential damages.
- This warranty is provided in addition to, and does not affect, the customer's mandatory statutory rights as a consumer depending on the country of purchase, for example, a 3-year right of complaint in Sweden and a minimum 2-year EU guarantee.

Installation, safety and requirement for professional competence
This electronic control unit (ECU) is an advanced vehicle component that requires specific automotive knowledge of the vehicle's electrical system in order to be installed safely and correctly.
The product should preferably be installed by a certified automotive technician or a professional workshop, or by someone with equivalent knowledge.
The following safety aspects must be met for the warranty to apply:
- Incorrect ignition or fuel configuration can damage the engine when the ECU is powered up.
- Always disconnect all outputs when updating firmware; updates are optional, free, advisable but not mandatory. Never update just before a competition, and MaxxECU accepts no liability for updates or software bugs.
- The ECU's engine ground must always connect to the cylinder head; engine and battery negative must always be grounded to the chassis/cylinder head.
- Disconnect the battery before electrical work or welding; never disconnect it while the engine is running.
- Keep fuel components and cables away from heat; ensure there are no fuel leaks and no uninsulated cables.
- Avoid open flames, sparks or electrical devices near flammable substances, and follow proper workshop safety procedures.
- Mount the ECU with the WIFI/Bluetooth antenna at least 10 cm away from the driver and passengers.

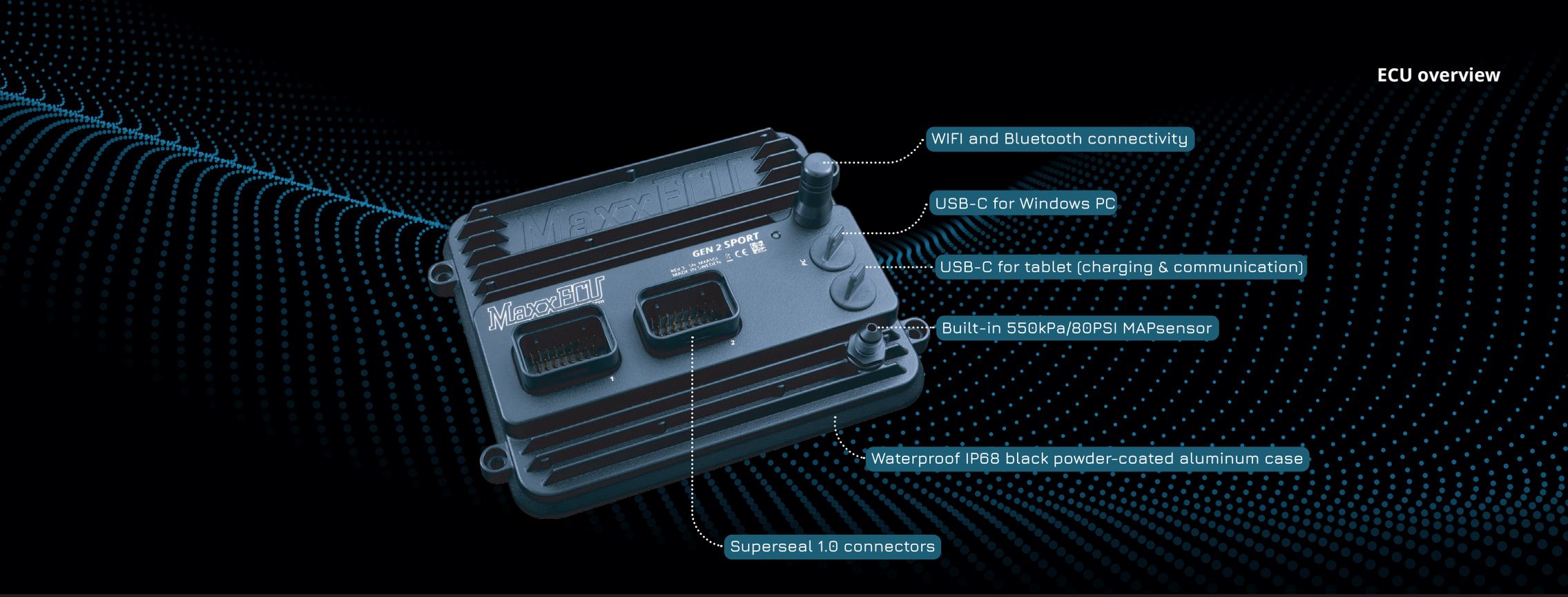
Legal disclaimer
All performance modifications and installations are at the customer's own risk. MaxxECU or its associates disclaim any liability, whether implied or otherwise, for mechanical, electrical or other failure when using any of our aftermarket products. As MaxxECU products are freely programmable, MaxxECU holds no responsibility for any settings, mapping or calibrations created or applied by the customer or any third party. The products are sold for motorsport use only and may be illegal for road use in many countries, states and provinces.
They are intended solely for racing vehicles and should never be used on public roads. By purchasing any MaxxECU aftermarket product, the customer assumes full responsibility for all use and/or misuse of the product, and agrees that MaxxECU holds no responsibility for any consequences, whether legal or otherwise, of such use and/or misuse. Nothing in this disclaimer excludes or limits liability for death or personal injury caused by negligence, for fraud, or any liability that cannot be excluded under mandatory law, nor any statutory rights the customer has as a consumer. These terms are governed by Swedish law.

Waste disposal (WEEE)
This product must not be disposed of with household waste. Return it to your dealer or to a collection point for electrical waste (Directive 2012/19/EU).

EU Declaration of Conformity
This EU Declaration of Conformity is issued under the sole responsibility of Maxxtuning AB (MaxxECU). The product described above is in conformity with Directive 2014/53/EU (Radio Equipment Directive) and Directive 2011/65/EU (RoHS Directive), applying the following harmonised standards: EMC: ETSI EN 301 489-1 V2.2.3; ETSI EN 301 489-17 V3.2.4; EN 55032:2015+A1:2020+A11:2020; EN 55035:2017+A11:2020. Safety: EN IEC 62368-1:2020+A11:2020. RF Exposure: EN 62311:2008. RoHS: EN IEC 63000:2018. Radio (2.4 GHz): ETSI EN 300 328 V2.2.2.
The radio equipment is intended for use in all EU/EEA member states without restriction.
Signed for and on behalf of Maxxtuning AB (MaxxECU): Natanael Ceder CEO. Vrigstad, Sweden.
Wi-Fi / Bluetooth: 2.4 GHz (2400–2483.5 MHz), max 20 dBm (100 mW) e.i.r.p. The product is CE-marked, which covers EMC/radio/RoHS conformity only and is not a type-approval for road vehicles.
The full text of the EU declaration of conformity is available at maxxecu.com/compliance

All MaxxECU products are for motorsport use only. They are not intended for use on the roads.

ECU overview



Technical

- Superseal 1.0 connectors.
- 550 kPa MAP sensor (4.5 bar / 65 PSI boost), user-serviceable, with BSP 1/8 thread.
- 3-axis accelerometer (up to 8 G).
- ARM dual core CPU.
- 6-22V operating voltage.
- 4GB internal log capacity, 1000Hz, all 2000+ channels.
- USB-C 480mbit/s (MTune PC communication).
- USB-C 12mbit/s (tablet charging).
- WIFI communication with MTune.
- Bluetooth connectivity with MDash.
- CAN bus for expansion modules, OEM vehicle CAN, OBDII, CAN transmission control.
- Resolution on ignition: 0.1 degrees.
- Resolution on injectors: 0.001 ms.
- Performs fuel and ignition calculations 3,000 times per second.
- 2000Hz sampling rate on analog/digital inputs.
- Weight: 450g.
- 175x138x35mm including protruding connectors.
- Black powder-coated aluminium case with IP68 water-protection rating.
- All inputs and outputs are safeguarded against overvoltage, reverse polarity, and short circuits
- ECU Temperature range: -40C to 105C (measured by the internal temperature sensor)

Target Engines of MaxxECU GEN2 SPORT
- All 1-12 cylinder engines (2/4-stroke)
- Up to 6 cylinders fully sequentially
- Up to 12 cylinders in wasted spark

MaxxECU GEN2 SPORT inputs
- 4 pulse inputs (VR/HALL): 2 with selectable 5/12V power supply, all with selectable pullups.
- 12 Analog inputs (selectable pullups)
- Single wideband lambda (LSU 5.2/4.9/4.2)
- Dual knock sensor input

MaxxECU GEN2 SPORT outputs
- 6 injectors (Peak-hold high/low impedance) / GP outputs
- 6 IGN / GP outputs (selectable +5V/12V/GND)
- 7 GP Outputs (GND)
- 2 GP Outputs (H-bridge/E-Throttle)

Contact YOUR local MaxxECU dealer, or go to **maxxecu.com/support**

Software installation

1. Download MTune PC-software from maxxecu.com/mtune.
2. Run the downloaded installer and follow the on-screen instructions.

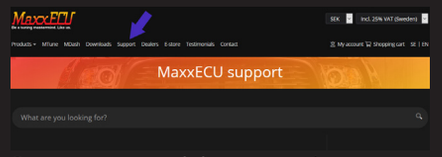
Help system
MaxxECU documentation is always available from maxxecu.com/support and is also integrated into MTune PC software.



Access to integrated help is available within MTune PC software by pressing the help button shown above, or by pressing the F1 key.



Integrated help is also available within MTune PC software after each input/output to get fast help.



Support page and documentation available on maxxecu.com/support.

ECU installation

GEN2 units are waterproof and may be mounted in the engine bay, provided they are kept away from excessive heat sources. For maximum reliability and protection from vibration, moisture, and temperature extremes, installation inside the vehicle cabin is recommended. Secure the ECU using all four mounting holes to a rigid metal bracket or chassis panel with appropriate screws and locking hardware.
The ECU must not be allowed to move or vibrate during vehicle operation. Ensure the wiring harness does not carry the ECU weight or place mechanical stress on the connectors.









The images above show examples of correctly mounted ECUs. Install the ECU on a rigid mounting plate or structural bracket using all four mounting holes. Select a location that provides adequate clearance for the connectors, wiring harness, and future service. The wiring harness should be independently secured to prevent connector loading caused by engine movement or vibration. Ensure that the ECU is protected from direct heat radiation, impact from road debris, and unnecessary exposure to water or chemicals. Verify after installation that the ECU, connectors, and wiring cannot interfere with moving components or become damaged during normal vehicle operation. The optional MaxxECU mounting bracket kit is recommended for a secure and professional installation.

Wiring - A proper wiring job is important to get a reliable vehicle.



Example of a finished engine harness.



Use a firewall bushing to prevent damage to the cables.



Use shrink tubing with adhesive when splicing cables.

Engine ground - Very important!

- Battery negative (−) must connect to the chassis or cylinder head.
- Engine must be grounded to the chassis.
- ECU engine ground must connect to the cylinder head.



Inputs

AIN (Analog Input)
- Accepts 0–5 V analog or digital signals, max 24 V.
- Digital threshold: 3 V. Selectable 2.5 kΩ 5 V pull-up.
- Analog update rate: 2 kHz. Input resistance: 200 kΩ.
- Switches/buttons and other slow signals in digital mode.

Note: Ethanol sensors, BSD, SENT, etc. are not supported here - use PULSE inputs instead.

Digital/VR (PULSE)
- Accepts digital or VR signals, max 200 V, up to 30 kHz.
- Selectable internal ground or floating (set in MTune).
- Input resistance: 62 kΩ.

Note: Floating mode is only for piggyback use when sharing trigger/ABS sensors.

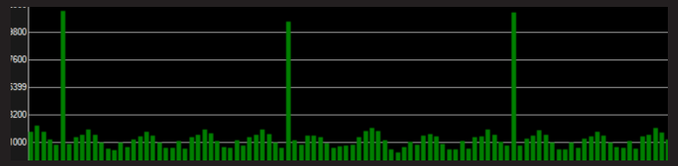
RPM requirements:
- Trigger sensor: wired to any PULSE input
- Home/CAM sensor: required for sequential operation, and in some trigger systems also for RPM detection.

Supply voltage
- The ECU supply voltage and all loads must be protected by fuses or overload/short-circuit-protected PDM outputs.
- Single ECU supply pin: Max. 15 A fuse.
- Two ECU supply pins: One max. 15 A fuse per pin, or one max. 30 A fuse for both pins.
- Use a separate fuse or fuses for the ignition coils.
- Additional fuses are required for GPO/injector output loads if the total output current exceeds 30 A.

Cable length
- 12V Supply, Power GND, and Lambda wiring: max 3m.
- Other wiring: Max. 30m.



Built-in trigger oscilloscope for diagnosing signals. Screenshot shows a crank VR sensor on PULSE1 (yellow), a VVTi cam signal (blue), and digital VVTi position signals (green, purple, red).
Diagnostics --> Trigger oscilloscope



Using the built-in trigger logger, connected signals can be examined and sent to us for implemantions of new trigger types.
Diagnostics --> Trigger logger



Wiring or trigger problem? --> Contact YOUR local MaxxECU dealer, or go to **maxxecu.com/support**

Outputs

GPO (Low)
- Ground-switching (sinking) output for general loads.
- Connect load between output and +12V (switched) source.
- Active = ground, off = floating.
- Max 3A continuous. Protected against overload, short circuit. Flyback protection 30V.

Injector (Peak/Hold)
- Ground-switching output for injectors (also usable for general loads).
- Connect load between output and +12V (switched) source.
- Active = ground, off = floating.
- Max 10A, 5A continuous. Selectable peak/hold currents.
- Flyback protection 30V with automatic regulation for fast, precise injector control.

Ignition
- 5V or 12V push-pull, or ground-switching output (set in MTune).
- Drives external ignition modules/smart coils or general loads.
- Push-pull: 5/12V when active, ground when off. 100 mA limit.
- Ground-switch: ground when active, floating when off. 1A limit.
- Flyback protection 30V.

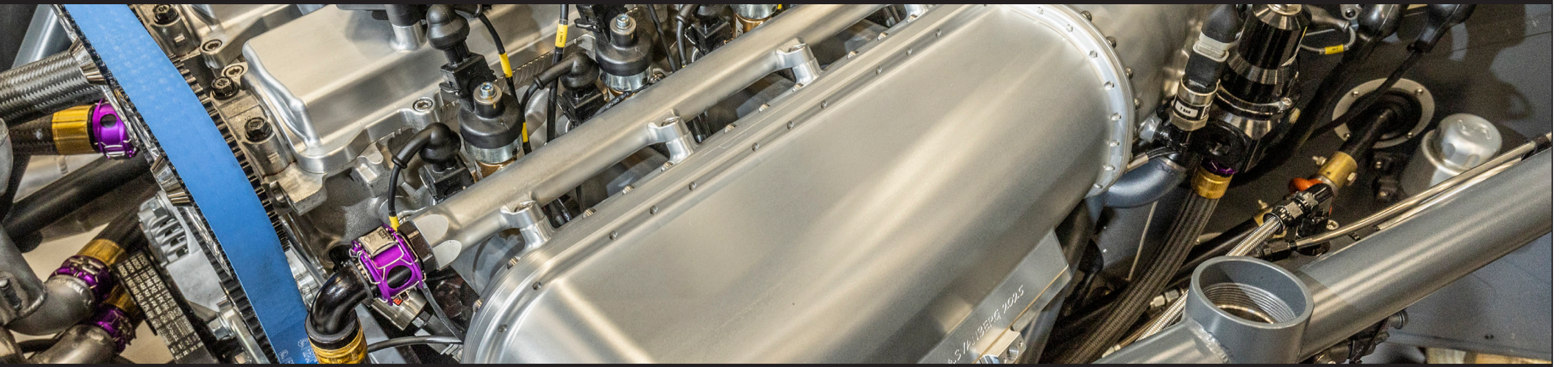
H-Bridge
- 12V push-pull (half-bridge) output for motors or loads.
- Active = 12V, off = ground.
- For bidirectional motors (e.g., throttles): connect the load between two H-bridge outputs.
- For general loads: connect the load between one H-bridge output and ground.
- Overload and short-circuit protected. PWM current-limiting.
- Max 7.5A-15A (selectable), 5A continuous.

Power Supply & Operating Temperature Limits

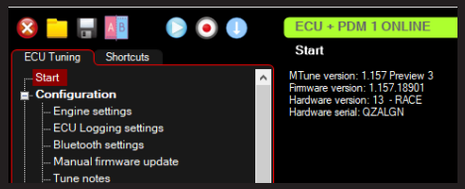
ECU Temperature range: -40C to 105C (measured by the internal temperature sensor).

- The maximum continuous current when all 12V and all Power GND pins are used is 30A total on the 12V pins and 30A total on the ground pins.
- The maximum continuous load on power supply pins: 12V1: 15A, 12V2: 15A, 12V3: 0.5A, Power GND: 15A per pin.

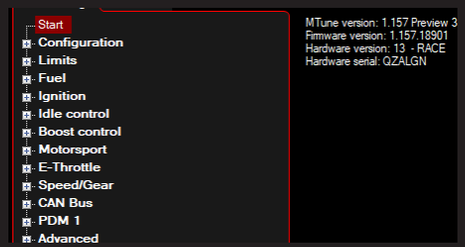
Ambient temperature range:
- Worst load case: -40C to 60C (all outputs continuously loaded to the max specified current, 60A total current)
- Typical load case: -40C to 85C (total continuous load current 40A)



Engine start



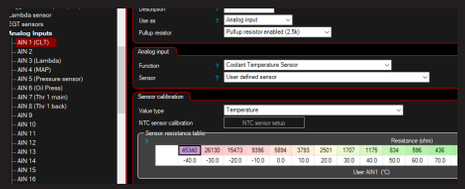
After installing MTune, connect the included USB cable and power up the ECU. To get started quickly, load a suitable base-tune directly from within MTune (no download needed) using the yellow “Open” icon and follow the on-screen instructions.



In MTune, go through the tabs and make a basic engine setup. Key settings include:

- Cylinders, firing order, engine volume. Configuration --> Engine settings
- Ignition coil dwell and system type- Ignition --> Ignition settings
- Injector type and fuel type. Fuel --> Fuel Inj General
- Trigger system and correct decoder. Inputs --> Trigger / Home inputs

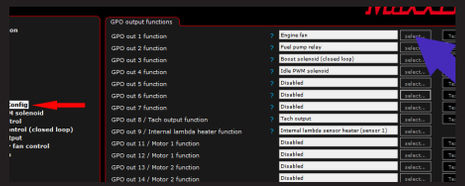
Tip: Use the built-in oscilloscope, trigger logger, and other tools to verify trigger setup.



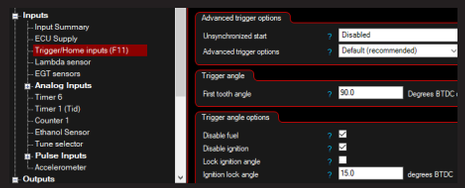
Throttle / CLT / IAT Calibration

Regular throttle: Calibrate TPS at 0% and 100% using the 2-point buttons in the analog input settings.
E-throttle: TPS shows pedal position; calibrate sensors in E-throttle settings.
CLT & IAT: Select correct sensors and verify values in RealTime Data.

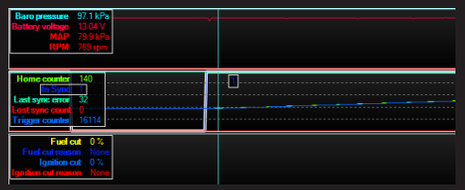
Please note that TPS value is pedal position when using E-Throttle.



Configure all outputs according to your wiring. Outputs --> Output config
Use Diagnostics --> Output test, to test configured injectors and coils.



To crank without starting, disable fuel/ignition under Inputs --> Trigger/HOME inputs, Trigger angle options.
Remember to re-enable before starting the engine.



Start cranking, check trigger polarity, and adjust timing with a timing lamp.

Diagnostics --> Trigger oscilloscope - View live trigger inputs.
Diagnostics --> Trigger logger - View timing between trigger events.
Inputs --> Trigger, Trigger angle options - Use lock ignition advance to sync timing.

When all inputs/outputs are configured and engine settings, trigger systems and ignition are synced, it is time to try to start the engine.

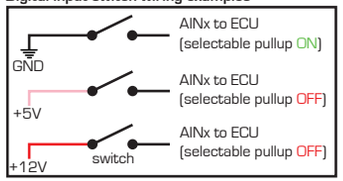
Engine start problems? --> Contact YOUR local MaxxECU dealer, or go to **maxxecu.com/support**

All AIN have selectable pullups.

MaxxECU

Example wiring. All AIN functions are assigned in MTune.

Digital input switch wiring examples



Throttle Position sensor (TPS) — pink
Coolant Temperature sensor(CLT) — black
Intake Air Temperature sensor (IAT) — black
Extra temperature sensor — black
Extra 0-5V sensor input — black
Sensor GND (splice to other sensors) — brown

Sensor or Shield GND must **NEVER** be connected to chassis OR engine!

VR-sensor (analog) signal
Switch, speed input, ethanol sensor / BSD / ABS / cam. — purple
Digital sensor signal — purple

Shielded wires may be needed to block VR sensor interference.

Example wiring for trigger signals.
All Pulse Input functions are assigned in MTune.
Any Pulse inputs may be used for trigger signals.
All Pulse inputs support both VR and digital signals.

Cable shields should only be grounded **through the ECU** (which is prewired).

VR-sensor (analog) signal
brown: Pulse -
white: Pulse +
If the sensor lacks a shield, isolate and leave unterminated.
white
brown
pink: selectable power supply (+5/12V). Isolate (and turn off supply) if not used.
pink

Digital sensor signal
white: Pulse +
brown: Pulse -
white
brown
pink

Digital supply selectable 5V or 12V
Always verify sensor specifications with the manufacturer before connection.

Engine cylinder head — brown

5V SENSOR SUPPLY - [MX1:22]	pink	CAN L [MX1: 15]	pink
AIN 1 - [MX1:26]	black	CAN H [MX1: 16]	grey
AIN 2 - [MX1:27]	black		
AIN 3 - [MX1:28]	black	IGNITION 1 - [MX1:1]	blue
AIN 4 - [MX1:29]	black	IGNITION 2 - [MX1:2]	blue
AIN 5 - [MX1:30]	black	IGNITION 3 - [MX1:3]	blue
		IGNITION 4 - [MX1:4]	blue
SENSOR GND - [MX1:14]	brown		
DIGITAL/VR 3 (PULSE) - [MX1:23]	purple		
DIGITAL/VR 4 (PULSE) - [MX1:24]	purple		
		INJECTOR 1 - [MX1:31]	grey
		INJECTOR 2 - [MX1:32]	grey
		INJECTOR 3 - [MX1:33]	grey
		INJECTOR 4 - [MX1:34]	grey
PULSE 1 SHIELD [MX1: 13]	white		
PULSE 1 + [MX1:10]	brown		
PULSE 1 - [MX1:11]	pink	GP OUT 1 (GND) - [MX1:5]	green
PULSE 1 SUPPLY [MX1:12]		GP OUT 2 (GND) - [MX1:6]	green
PULSE 2 SHIELD [MX1: 21]	white	GP OUT 3 (GND) - [MX1:7]	green
PULSE 2 + [MX1:18]	brown	GP OUT 4 (GND) - [MX1:8]	green
PULSE 2 - [MX1:19]	pink	GP OUT 5 (GND) - [MX1:17]	green
PULSE 2 SUPPLY [MX1:20]		12V ECU SUPPLY 1 - [MX1:25]	red
ENGINE GND - [MX1:9]	brown		

CAN-bus 1. 120Ω termination resistor built-in.

Ignition coil 1
Ignition coil 2
Ignition coil 3
Ignition coil 4

+12v power supply for ignition coils

+12v power supply relays, solenoids etc.

Injector 1
Injector 2
Injector 3
Injector 4

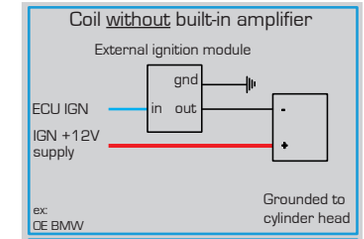
Extra output 1
Extra output 2
Extra output 3
Extra output 4
Extra output 5 / TACHO

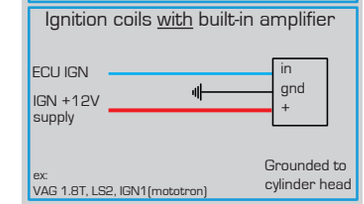
Engine
Battery
15A (Ignition)
15A (ECU)
IGN switch

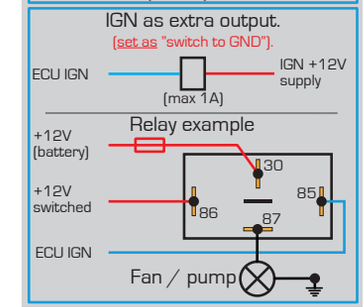


GEN2 TRACK/RACE/SPORT
Connector 1 (MX1)

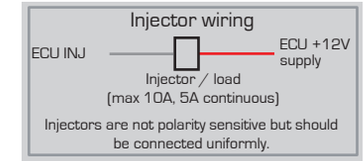
Ignition output examples (5V/12V or ground).

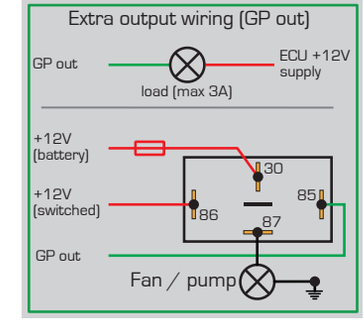






INJ and GP ground output examples.

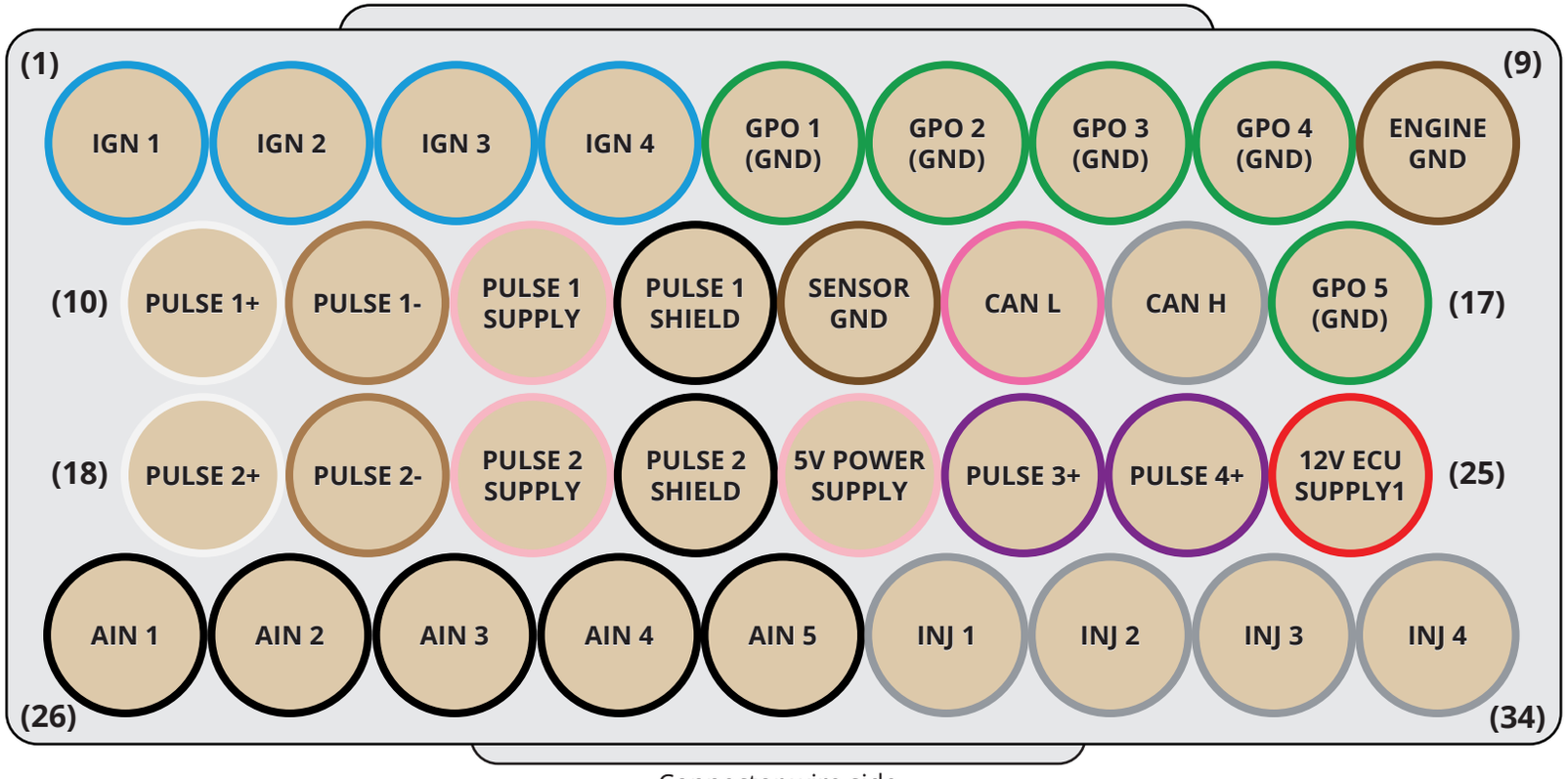




Available connector kit
Superseal 1.0, key MX1
Product ID: 2416

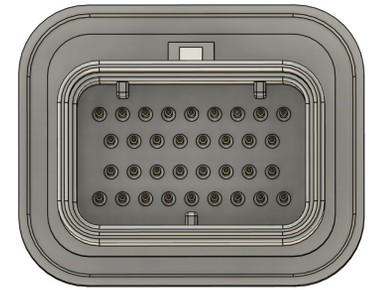
Maximum continuous current: 30A total (all 12V pins).
Pin limits: 12V1 15A, 12V2 15A, 12V3 0.5A, Power GND 15A/pin.
ECU supply and all loads must be fused or PDM protected.

MaxxECU GEN2
TRACK/RACE/SPORT (**MX1**)
2026-10-03
maxxecu.com/support

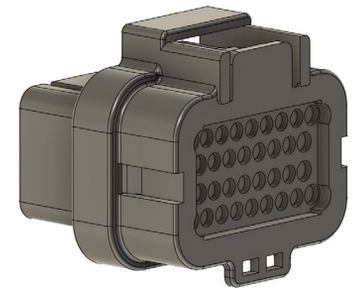


Connector wire side

MX1 keying



ECU side



Wire side

Pin	Function	Note
1	IGNITION 1	
2	IGNITION 2	
3	IGNITION 3	
4	IGNITION 4	
5	GP OUT 1 (GND)	
6	GP OUT 2 (GND)	
7	GP OUT 3 (GND)	
8	GP OUT 4 (GND)	
9	ENGINE GND	
10	DIGITAL/VR 1 (PULSE) SIGNAL +	
11	DIGITAL/VR 1 (PULSE) SIGNAL -	
12	DIGITAL/VR 1 (PULSE) POWER SUPPLY	
13	DIGITAL/VR 1 (PULSE) SHIELD	
14	SENSOR GND	
15	CAN L	
16	CAN H	
17	GP OUT 5 / TACHO (GND)	

Pin	Function	Note
18	DIGITAL/VR 2 (PULSE) SIGNAL +	
19	DIGITAL/VR 2 (PULSE) SIGNAL -	
20	DIGITAL/VR 2 (PULSE) POWER SUPPLY	
21	DIGITAL/VR 2 (PULSE) SHIELD	
22	5V POWER SUPPLY	
23	DIGITAL/VR 3 (PULSE) SIGNAL +	
24	DIGITAL/VR 4 (PULSE) SIGNAL +	
25	12V ECU SUPPLY 1	
26	AIN 1	
27	AIN 2	
28	AIN 3	
29	AIN 4	
30	AIN 5	
31	INJECTOR 1	
32	INJECTOR 2	
33	INJECTOR 3	
34	INJECTOR 4	

Available connector kit
Superseal 1.0, key MX1
Product ID: 2416

Sensor or Shield GND must **NEVER** be connected to chassis OR engine!

Sensor GND (from connector 1)
5V SUPPLY (from connector 1)

MaxxECU

Extra temperature / 0-5V sensor inputs
- All AIN have selectable pullups.
- Functions are assigned in MTune.

black: AIN 6 - [MX2:4]
black: AIN 7 - [MX2:5]
black: AIN 8 - [MX2:6]
black: AIN 9 - [MX2:13]
black: AIN 10 - [MX2:14]
black: AIN 11 - [MX2:15]
black: AIN 12 - [MX2:16]

IGNITION 5 - [MX2:1] — blue — Ignition coil 5
IGNITION 6 - [MX2:2] — blue — Ignition coil 6
INJECTOR 5 - [MX2:33] — grey — Injector 5
INJECTOR 6 - [MX2:34] — grey — Injector 6
GP OUT 6 (GND) - [MX2:3] — green — Extra output 6
GP OUT 13 (H-BRIDGE 1) - [MX2:7] — white — H-bridge 1
GP OUT 14 (H-BRIDGE 1) - [MX2:8] — white — H-bridge 1

Refer to the wiring diagram for GEN2 connector 1 (MX1) for Ignition, Injector, and GP output connections.

H-bridge output examples

General purpose load
Max 15A, 5A continuous.

Bidirectional motor control
ECU H-bridge
ECU H-bridge
E-throttle positions.
To ECU AIN.

Outputs 12V when active, and switches to ground when not active.

Connector wire-side view (terminal insertion side)

LSU 4.9 / 5.2

The standard supplied sensor is LSU **5.2**)

PIN#	Wire text/function
1	IP
2	VREF
3	Heater-
4	Heater+
5	RCAL
6	VS

LSU 4.2

PIN#	Wire text/function
6	IP
5	VREF
4	Heater+
3	Heater-
2	RCAL
1	VS

Use only recommended sensors:
LSU 5.2: Bosch 0258 037 010 / 0258 037 022
LSU 4.9: Bosch 0281 004 191 / 0258 017 025
LSU 4.2: Bosch 0258 007 057

Lambda sensor 1

IP — LAMBDA 1 IP - [MX2:19]
VREF — LAMBDA 1 COM/VREF - [MX2:11]
Heater- — LAMBDA 1 HEATER- / GP OUT 7 (GND) - [MX2:12]
Heater+ — LAMBDA 1 HEATER+ (12V) - [MX2:20]
RCAL — LAMBDA 1 RCAL - [MX2:18]
VS — LAMBDA 1 VS - [MX2:10]

Not used (plugged) — LAMBDA 1 SHIELD - [MX2:21]

Cable shields should only be grounded through the ECU (which is prewired).

shield — KNOCK1 SHIELD [MX2:26]
brown — KNOCK1- [MX2:27]
white — KNOCK1+ [MX2:28]
shield — KNOCK2 SHIELD [MX2:29]
brown — KNOCK2- [MX2:30]
white — KNOCK2+ [MX2:31]
brown — ENGINE GND - [MX2:9]

Knock sensor #1



Knock sensor #2



Use only recommended sensors:
Bosch 0261 231 046
(Knock sensor(s) are not polarity sensitive)

Isolate and leave unterminated.

Engine cylinder head

12V ECU SUPPLY 2 - [MX2:25]
12V ECU SUPPLY 3 - [MX2:24]

Always power both ECU SUPPLY 1 and ECU SUPPLY 2 (required if 12V output >10A, and strongly recommended in all setups).

Use the same power source as connector 1 (MX1).

Power wiring examples

12V on all power inputs, standard.
12V ECU SUPPLY 1 - [MX1:25]
12V ECU SUPPLY 2 - [MX2:25]
12V ECU SUPPLY 3 - [MX2:24]
Fuse

12V constant example, to keep RTC running.
12V ECU SUPPLY 1 - [MX1:25]
12V ECU SUPPLY 2 - [MX2:25]
12V ECU SUPPLY 3 - [MX2:24]
Fuse

Power hold with relay on main power.
12V ECU SUPPLY 1 - [MX1:25]
12V ECU SUPPLY 2 - [MX2:25]
12V ECU SUPPLY 3 - [MX2:24]
GP OUT x (LOW)
Fuse
To loads
30
85
86
87
30A relay



MTune power hold example configuration

Optional constant 12V SUPPLY 3 (0.6mA) extends clock runtime beyond 2 weeks with ECU off.

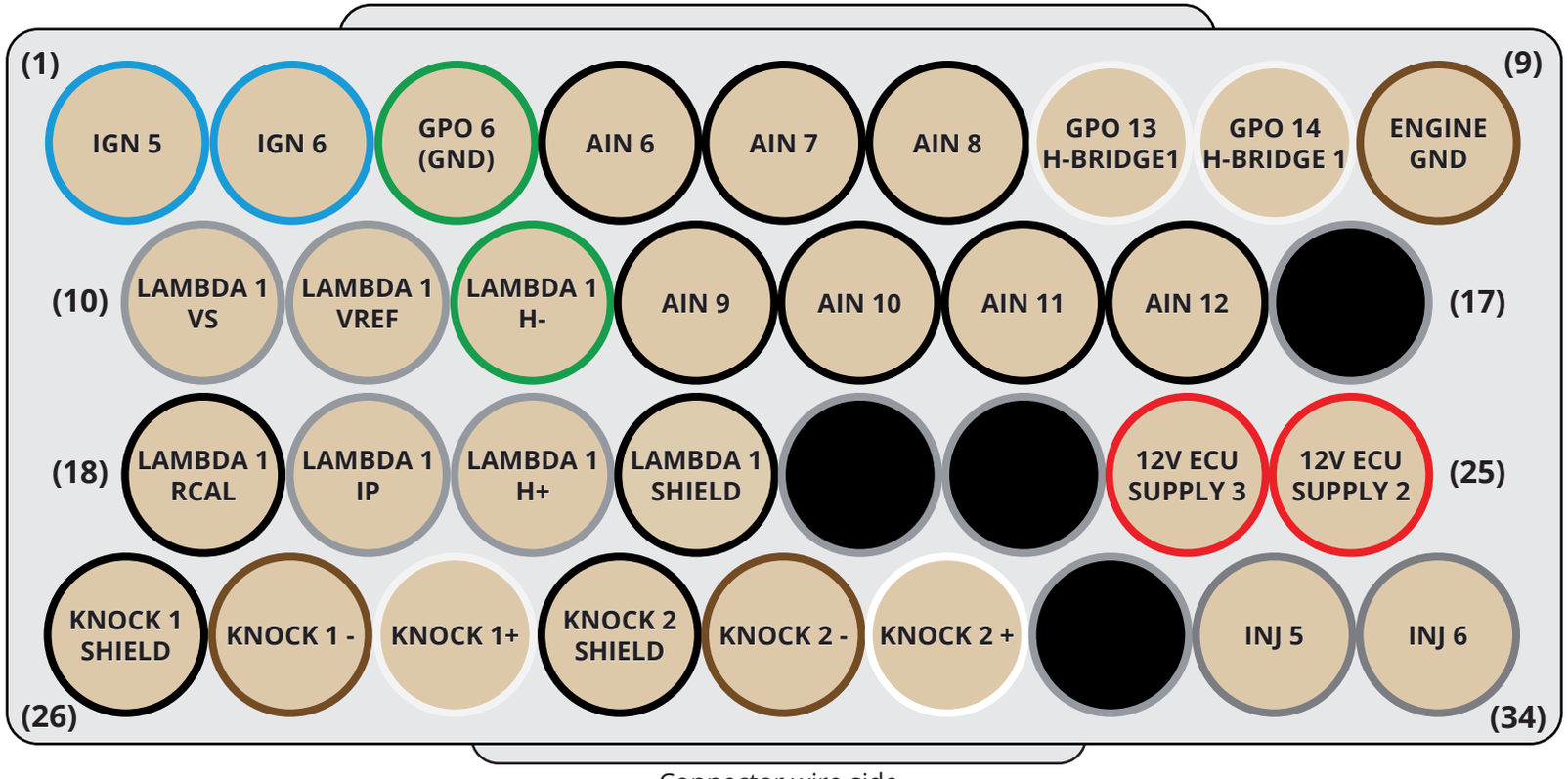


GEN2 SPORT
Connector 2 (MX2)

Maximum continuous current: 30A total (all 12V pins).
Pin limits: 12V1 15A, 12V2 15A, 12V3 0.5A, Power GND 15A/pin.
ECU supply and all loads must be fused or PDM protected.

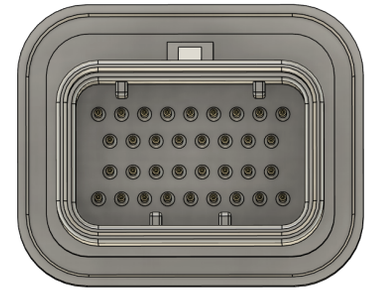
Available connector kit
Superseal 1.0, key MX2
Product ID: 2557

MaxxECU GEN2 SPORT (**MX2**)
REV2 harness 2026-10-03
maxxecu.com/support

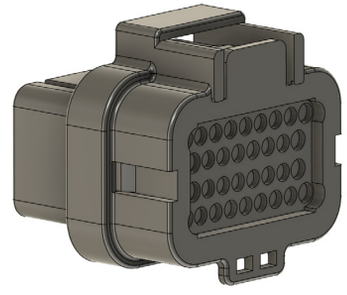


Connector wire side

MX2 keying



ECU side



Wire side

Pin	Function	Note
1	IGNITION 5	
2	IGNITION 6	
3	GP OUT 6 (GND)	
4	AIN 6	
5	AIN 7	
6	AIN 8	
7	GP OUT 13 (H-BRIDGE 1)	
8	GP OUT 14 (H-BRIDGE 1)	
9	ENGINE GND	
10	LAMBDA 1 VS	
11	LAMBDA 1 COM/VREF	
12	LAMBDA 1 HEATER- / GP OUT 7 (GND)	
13	AIN 9	
14	AIN 10	
15	AIN 11	
16	AIN 12	
17	NOT USED	

Pin	Function	Note
18	LAMBDA 1 RCAL	
19	LAMBDA 1 IP	
20	LAMBDA 1 HEATER+ (12V)	
21	LAMBDA 1 SHIELD	Not used in REV2 harness
22	NOT USED	
23	NOT USED	
24	12V ECU SUPPLY 3	
25	12V ECU SUPPLY 2	
26	KNOCK 1 SHIELD	
27	KNOCK 1-	
28	KNOCK 1+	
29	KNOCK 2 SHIELD	
30	KNOCK 2-	
31	KNOCK 2+	
32	NOT USED	
33	INJECTOR 5	
34	INJECTOR 6	

Available connector kit
Superseal 1.0, key MX2
Product ID: 2557

Thank you for using MaxxECU!

"You as a customer is our most valued asset"



GEN2

www.maxxecu.com