

# Micro Input Module

(VBMICIN01 / VBMICIN01C)



Designed to provide an easy and useful way of acquiring vehicle information, the Micro Input Module allows you to pick up parameters such as RPM and throttle angle and synchronise it with the GPS data in your Racelogic logger.

The Micro Input Module has an RPM (digital) frequency input and four analogue voltage inputs. Communication with connected units is via RS232 or CAN, depending on the type of data logger connected.

The Micro Input Module comes in five package variations.

- 1) **RLPBMICIN01**  
Used with PerformanceBox, DriftBox and VBOX Mini ONLY. (PerformanceBox units older than October 09 require hardware upgrade)
- 2) **RLVBMICIN01L**  
Used with VBOX units with Lemo connections such as Video VBOX Pro, VBOX Video HD2, VB2SX and VBOX 3i.
- 3) **RLVBMICIN01F**  
Used with units with Fischer connections: VBOX Micro or Performance Box Sport ONLY.
- 4) **RLVDLMICIN01**  
Used with Video VBOX Lite only.
- 5) **RLVDWMICIN01**  
Used with Video VBOX Waterproof only.



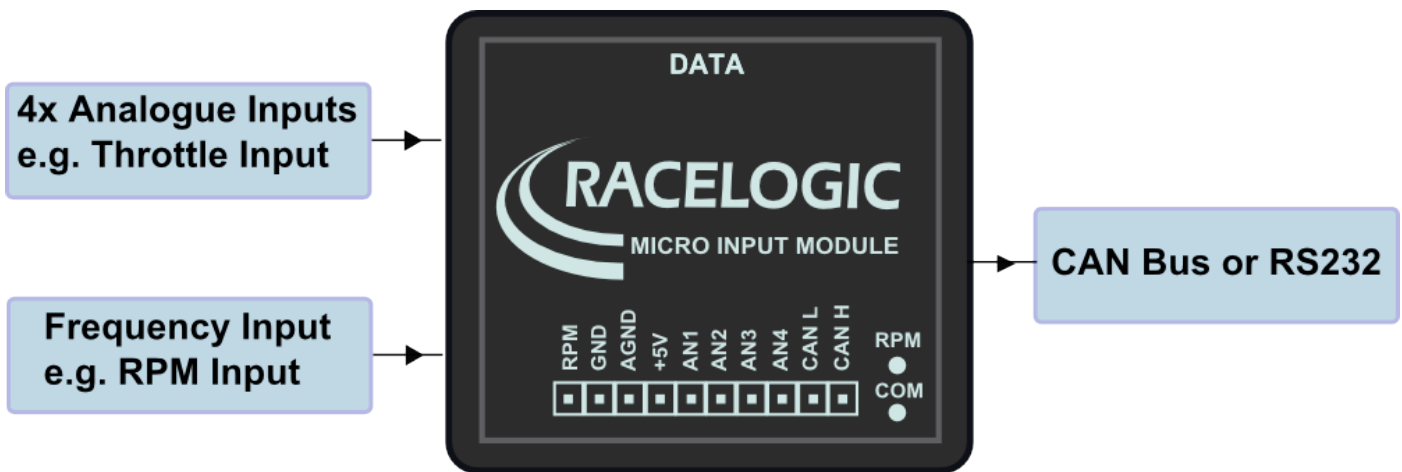
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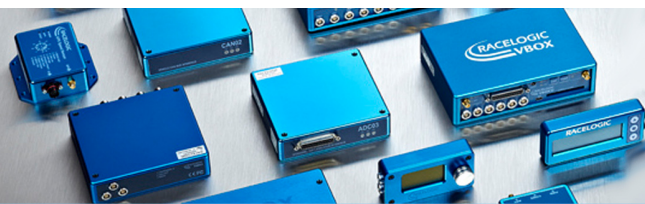
## Inputs / Outputs

Inputs	Outputs									
<p><b>Analogue Inputs (AN1 – AN4)</b></p> <p>4 analogue inputs are included, which are capable of measuring 0 – 14.5V DC.</p>	<p><b>CAN Output</b></p> <p>The analogue and digital signals are outputted via CAN when the Micro Input Module is connected to a VBOX. Note that CAN is output only – cannot take an input from Vehicle CAN.</p>									
<p><b>RPM Input (RPM)</b></p> <p>The RPM input connects to the low-tension side of an ignition coil, enabling users to detect the RPM frequency. The input can process voltage spikes in excess of +/- 200 V, and a maximum of 666 Hz i/p frequency. The RPM input is a digital frequency input and is also capable of measuring digital signals such as 5 V TTL and 0 – 12 V digital pulse signals.</p>	<p><b>RS232</b></p> <p>VBOX Mini, DriftBox, and PerformanceBox utilise the RS232 output.</p>									
<p>Front panel inputs and LED indicators. (Note that CAN is output only – cannot take an input from Vehicle CAN)</p>	<table border="1"> <thead> <tr> <th>Pin</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Module RS232 Receive</td> </tr> <tr> <td>2</td> <td>CAN H (output only on appropriate model – cannot connect to Vehicle CAN)</td> </tr> <tr> <td>3</td> <td>CAN L (output only on appropriate model – cannot connect to vehicle CAN)</td> </tr> </tbody> </table>	Pin	Function	1	Module RS232 Receive	2	CAN H (output only on appropriate model – cannot connect to Vehicle CAN)	3	CAN L (output only on appropriate model – cannot connect to vehicle CAN)	
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## Specification

Analogue Inputs		Outputs	
Input Number	4 x Analogue input (for throttle position sensor etc.)	VBOX/ Video VBOX	CAN Bus (Output only – cannot connect to vehicle)
Input Range	0 – 14.5 V	VBOX Mini/ PB / DB	RS232
Resolution	14 mV (10 bit Analogue to Digital Conversion)	Sensor Supply	5 V
Input Impedance	4 MΩ		
Accuracy	±30 mV		
Digital (RPM) Input			
Input Number	1 x RPM Input: connection to low tension coil signal		
Input Frequency Range	0 - 666 Hz (0 - 333 Hz for historic mod unit VBMICIN01H)		
Voltage	12 V peak-peak I/P voltage - low tension side of coil tolerant		
Resolution	0.1 RPM		

Power	
Output	5 V sensor supply – 300mA max
Operating Range	6 V - 30 V – powered from connected data logger
LEDs	2 LEDs: indicate operation

Environmental and physical	
Size	68 mm x 68 mm x 30 mm
Operating Temperature	-30°C to +70°C
Storage Temperature	-40°C to +85°C
Weight	65 g

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### Package Contents

Description	Qty	RL Part #
<b>RLPBMICIN01 (PB / DB / VBOX Mini)</b>		
Micro Input Module unit	1	VBMICIN01
Connecting cable	1	RLCAB094
<b>RLVBMICIN01F (VBOX Micro / PB Sport)</b>		
Micro Input Module unit	1	VBMICIN01C
Connecting cable	1	RLCAB091
<b>RLVBMICIN01L (VVB Pro / VBOX Video HD2 / VBOX)</b>		
Micro Input Module unit	1	VBMICIN01C
Connecting cable	1	RLCAB090-C
<b>RLVDLMICIN01 (VVB Lite)</b>		
Micro Input Module unit	1	VBMICIN01C
Connecting cable	1	RLCAB094-C
<b>RLVDWMICIN01 (VVB Waterproof)</b>		
Micro Input Module unit	1	VBMICIN01C
Connecting cable	1	RLCAB094H