

# Micro Input Module

(RLVBMICIN01-L)



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**, and comes in four versions.

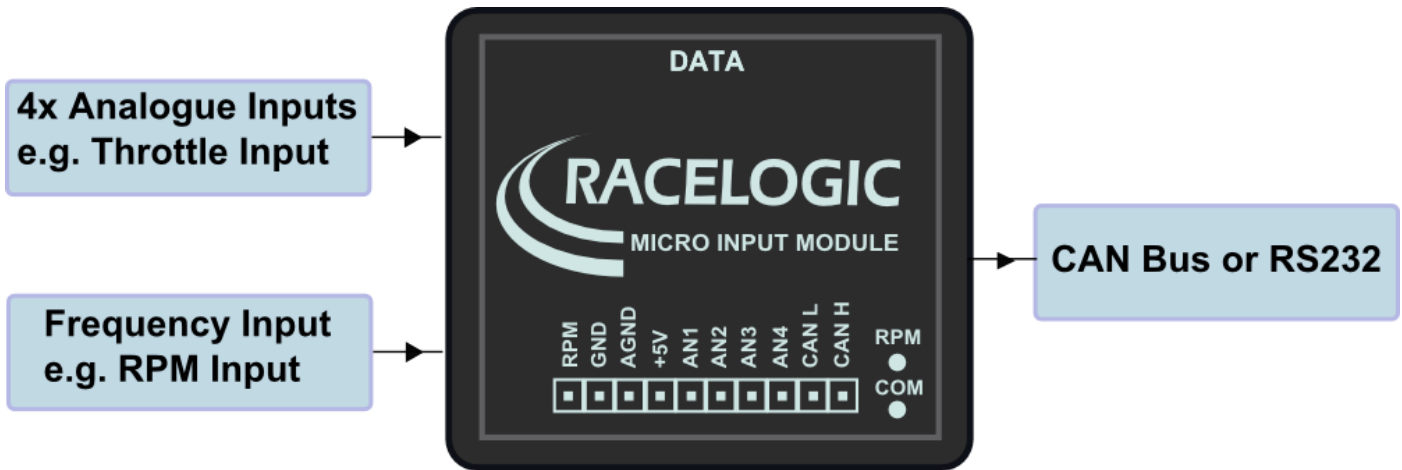


- RLPBMICIN01: for use with PerformanceBox, DriftBox and VBOX Mini ONLY. (PerformanceBox units older than October 09 require hardware upgrade)
- RLVBMICIN01-L: for use with VBOX units with Lemo connections such as Video VBOX Pro, VB2SX and VBOX 3i.
- RLVBMICIN01-F: for use with units with Fischer connections: VBOX Micro or Performance Box Sport ONLY.
- RLVDLMICIN01: for use with Video VBOX Lite 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 +/- 200V, and a maximum of 666Hz i/p frequency. The RPM input is a digital frequency input and is also capable of measuring digital signals such as 5V TTL and 0 - 12v digital pulse signals.</p>	<p><b>RS232</b></p> <p>VBOX Mini, DriftBox, and PerformanceBox utilise the RS232 output.</p>									
<div style="display: flex; align-items: center; justify-content: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; gap: 5px;"> <span>RPM</span> <span>GND</span> <span>AGND</span> <span>+5V</span> <span>AN1</span> <span>AN2</span> <span>AN3</span> <span>AN4</span> <span>CAN L</span> <span>CAN H</span> </div> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> <div style="border: 1px solid black; width: 15px; height: 15px; margin: 2px;"></div> </div> <div style="display: flex; flex-direction: column; align-items: center; margin-left: 10px;"> <div style="display: flex; align-items: center;"> <span style="margin-right: 5px;">RPM</span> <div style="width: 10px; height: 10px; background-color: black; border-radius: 50%;"></div> </div> <div style="display: flex; align-items: center;"> <span style="margin-right: 5px;">COM</span> <div style="width: 10px; height: 10px; background-color: black; border-radius: 50%;"></div> </div> </div> </div> <p>Front panel inputs and LED indicators. (Note that CAN is output only – cannot take an input from Vehicle CAN)</p> </div>	<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)	
Pin	Function									
1	Module RS232 Receive									
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### Specification

Analogue Inputs		Digital (RPM) Input	
<b>Input Number</b>	4 x Analogue input (for throttle position sensor etc.)	<b>Input Number</b>	1 x RPM Input: connection to low tension coil signal
<b>Input Range</b>	0 – 14.5V	<b>Range</b>	0 to 666Hz input frequency
<b>Resolution</b>	14mV (10 bit Analogue to Digital Conversion)	<b>Voltage</b>	12V peak-peak I/P voltage - low tension side of coil tolerant
<b>Input Impedance</b>	4MΩ	<b>Resolution</b>	0.1 RPM
<b>Accuracy</b>	±30mV		
Outputs		Environmental and physical	
<b>VBOX / Video VBOX</b>	CAN Bus (Output only – cannot connect to vehicle)	<b>Size</b>	68mm x 68mm x 30mm
<b>VBOX Mini / PB / DB</b>	RS232	<b>Operating Temperature</b>	Minus 30 to +70 Deg C
<b>Sensor Supply</b>	5V	<b>Storage Temperature</b>	Minus 40 to +85 Deg C
		<b>Weight</b>	65g
Power			
<b>Output</b>	5V sensor supply – 300mA max		
<b>Operating Range</b>	6V to 30V – powered from connected data logger		
<b>LEDs</b>	2 LEDs: indicate operation		

### Package Contents

Description	Product Code
<b>1 x Micro Input Module (for PerformanceBox, DriftBox and VBOX Mini ONLY)</b>	<b>RLPBMICIN01</b>
1 x Micro Input Module User manual	VBMICIN01MAN
1 x 6 PIN MINI DIN Male to Male	RLCAB094
<b>Micro Input Module (for units with Lemo connections such as Video VBOX and VBOX 3i)</b>	<b>RLVBMICIN01-L</b>
Micro Input Module User manual	VBMICIN01MAN
6 PIN MINI DIN Male to 5w Lemo plug	RLCAB090
<b>Micro Input Module (for VBOX Micro or PerformanceBox Sport ONLY)</b>	<b>RLVBMICIN01-F</b>
Micro Input Module User manual	VBMICIN01MAN
6 PIN MINI DIN Male to 5w Fischer plug	RLCAB091
<b>Micro Input Module (for Video VBOX Lite ONLY)</b>	<b>RLVDLMICIN01</b>
Micro Input Module User manual	VBMICIN01MAN
6 PIN MINI DIN Male to Male	RLCAB094