

# AiM User Manual

## Memory Module

Release 1.02

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## 1 – What is Memory Module

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Memory Module is the AiM mass data storage expansion for car/bike installations. It is connected to AiM loggers via a 40cm cable and communicates using AiM proprietary CAN bus.



**Note:** the SD card is not included in the kit.

## 2 – AiM devices compatibility

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The following table shows which AiM dashes/loggers are compatible with Memory Module and from which firmware version.

<b>Device</b>	<b>Memory Module</b>	<b>Firmware Version</b>
MXL2	Yes	From firmware version 1.26.08 onward
MXG	Yes	From firmware version 1.26.08 onward
MXS	Yes	From firmware version 1.26.08 onward
EVO4S	Yes	From firmware version 1.26.08 onward
EVO5	Yes	From firmware version 1.26.08 onward
MXS 1.2	Yes	From firmware version 2.26.48 onward
MXP	Yes	From firmware version 2.26.48 onward
MXG 1.2	Yes	From firmware version 2.26.48 onward
MXS 1.2 Strada	No	
MXP Strada	No	
MXG 1.2 Strada	No	
MXsl	No	
MXm	No	
Solo 2	No	
Solo 2 DL	No	

## 3 – Connection

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Memory Module can be connected to all new generation AiM loggers:


- MX, MX 1.2 series and EVO5: connect it to cable labelled “Exp” of 37 pins Deutsch connector harness
- EVO4S: connect it to 5 pins Binder 712 female connector labelled “Exp”

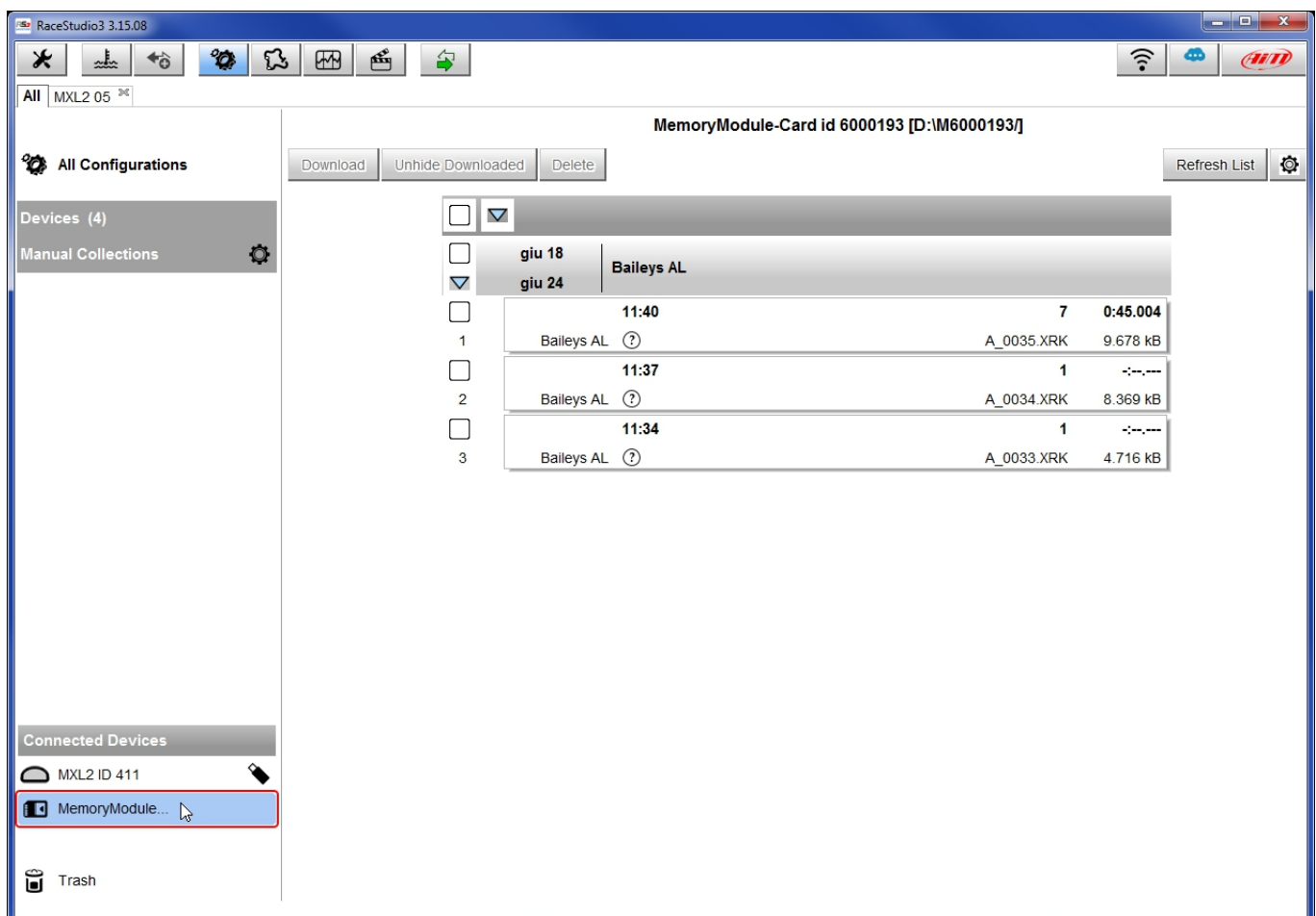
## 4 – How does Memory Module work

Memory Module stores data sampled by your AiM logger. No configuration is needed:

- just connect Memory Module to your AiM logger **before** it starts recording
- Memory Module and AiM logger store data simultaneously

When the session is over:

- get the SD card off the Module and place it in your PC SD slot
- run Race Studio 3 software
- click on the setting icon 
- click on Memory Module (bottom left of the software page)
- “Download” page shows up: perform data download as for any AiM device



- click Analysis button to start analysing your data.

## 4.1 – Memory Module LED working mode

Memory Module features a front LED.



The table below shows its working mode:

<b>Led status</b>	<b>Meaning</b>
Green Steady	Memory Module and Logger are recording
Green blinking 1 Hz	Memory Module connected to logger but not recording
Green blinking 3Hz	SD Missing
Red steady ->Red blinking 1Hz ->Green blinking 1Hz	FirmUp start ->writing -> done
Red steady ->Red blinking 1Hz	FirmUp Failed Solution: Disconnect Memory Module from the network, connect it directly to the logger, re-start FirmUp



## 5 – Supported SD card dimensions and format

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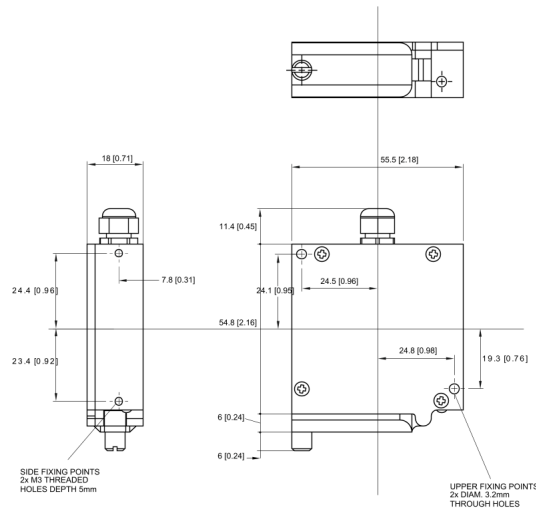
The recommended SD memory sizes for use with AIM dashes is **4GB**. Other SD sizes should work, provided that the SD is formatted as **FAT32** (exFAT and NTFS do NOT work).

The operation of the memory modules is affected by the SD card speed for specific operations. We found that most **class 10 and above** SD cards with **sizes up to 32GB** work reliably.

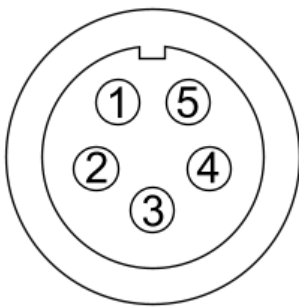
According to our testing, most SD cards with higher sizes do not work. Furthermore, these SD cards are not shipped with FAT32 formatting by default, so they are not recognized by the memory modules.

## 6 – Dimensions, pinout and technical characteristics

The drawing here below shows the Memory Module dimensions in mm [inches].



Memory Module cable ends with a 5 pins Binder 712 male connector. Here below it is shown, front view, with its pinout.



### Binder connector pin

- 1
- 2
- 3
- 4
- 5

### Pin function

- CAN High
- GND
- +Vb
- CAN Low
- n.c.

Memory Module **technical characteristics** are:

- Max power consumption: 50 mA
- Cable length: 40cm
- Cable part number: **X08MMD040**
- Dimensions: 55.5x78.3x18 mm
- Weight: 103g
- Waterproof: IP65