Channel Expansion

User Manual

Racing Data Power
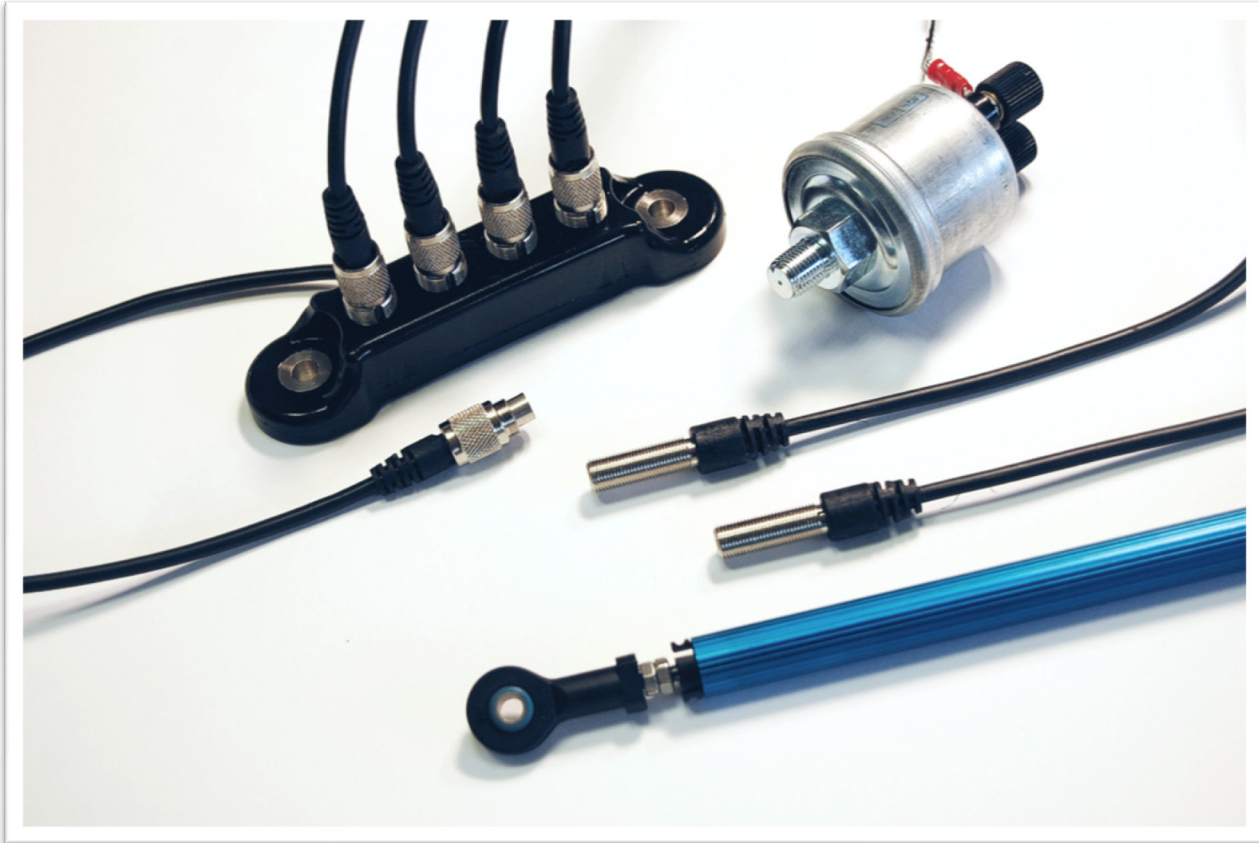
Index

Chapter 1 – Introduction

Channel Expansion is an analog channels multiplier.

Channel Expansion communication protocol increases the available channels for data acquisition, without occupying or modifying any of the existing system channels. **Channel Expansion** allows to transfer to the logger signals from sensors, without any need of wiring, so decreasing the number of cables.
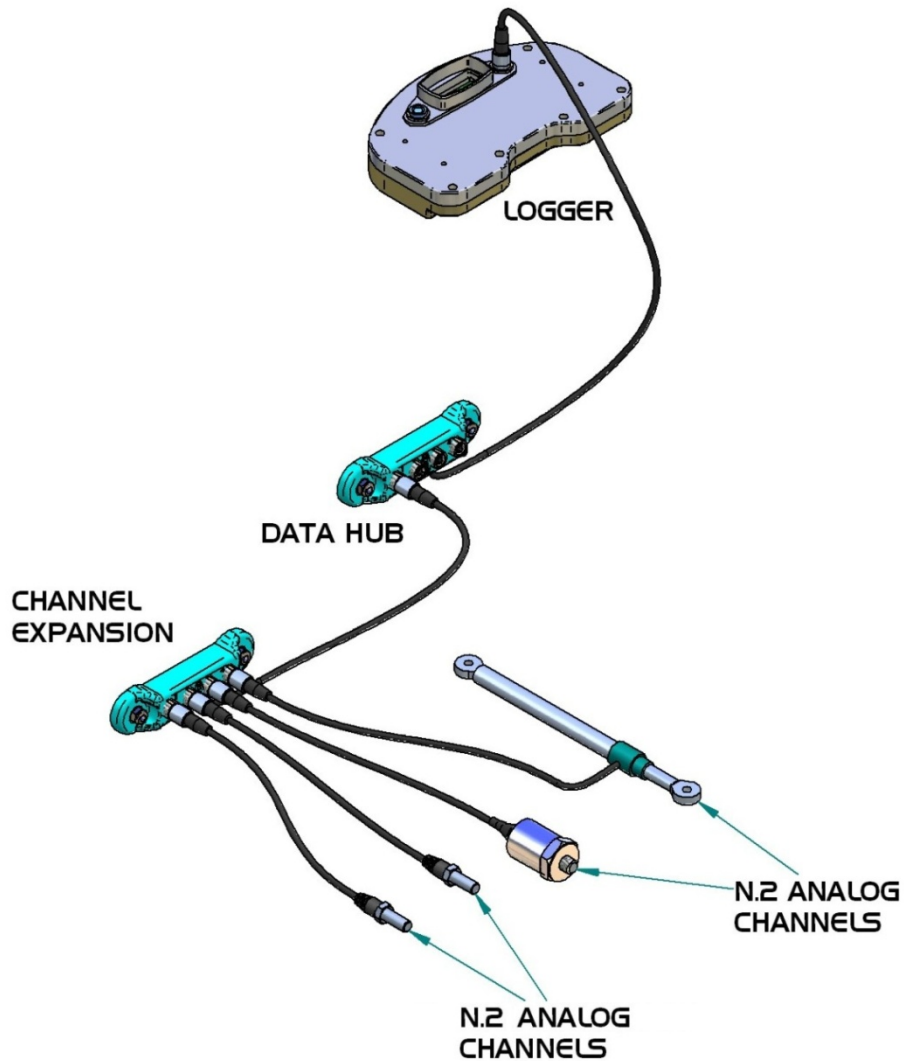**Channel Expansion** can be connected to **MXL Pista/Pro05** and **EVO3 Pro/Pista** and **EVO4**.
Channel Expansion is IP 67 waterproof.

Capitolo 2 – Connection to MXL – Evo3 Pista/Pro – Evo4

Channel Expansion is very easy to install: it is enough to fix it using the side holes. After installation, **Channel Expansion** connection is to be made according to the following connection scheme:

Once configured via **Race Studio 2**, **Channel Expansion** will be recognized automatically by the logger when it switches on.

Chapter 3 – Channel Expansion configuration

Channel Expansion must be configured using Race Studio2 software in order to be used. **Channel Expansion** configuration is to be made in the way explained in **Race Studio 2 Configuration** user manual - "**How to configure Channel Expansion**" chapter.

3.1 – Display configuration

When channels to enable/disable are defined, it is possible to visualize them according to the type of logger.

For more details, please refer to "**How to configure MXL Strada/Pista/Pro/Pro05**", " **How to configure AIM displays**" (for all EVO loggers) chapters of **Race Studio 2 Configuration** user manual.

3.2 – Sensor Calibration

When configuration has been transmitted to the logger, it is necessary to do calibration of sensors, connecting them to **Channel Expansion**.
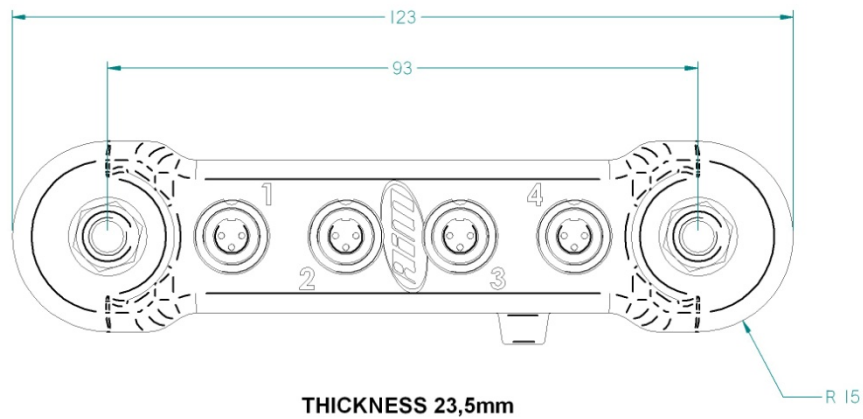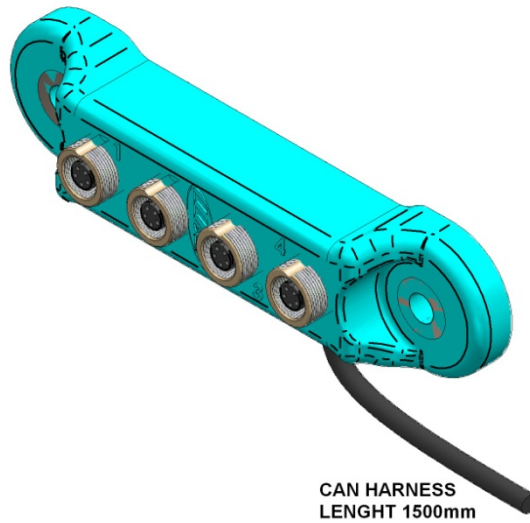
For more details, please refer to "Calibration and Autocalibration of sensors" of **Race Studio Configuration** user manual.
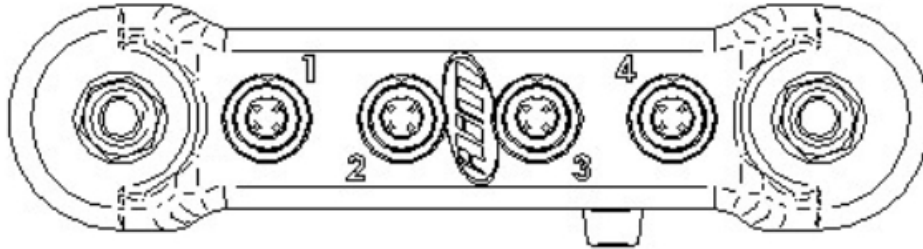
Appendix

Appendix A – Product code

Channel Expansion (Kit with cable): X08CHEXUC

Appendix B – Technical schemes

CAN HARNESS
LENGHT 1500mm

THICKNESS 23,5mm

CHANNEL EXPANSION pinout

4 PIN FEM. BINDER
CONNECTOR PINOUT

POSITION 1		POSITION 2		POSITION 3		POSITION 4	
1	ANALOG INPUT 1	1	ANALOG INPUT 2	1	ANALOG INPUT 3	1	ANALOG INPUT 4
2	GND	2	GND	2	GND	2	GND
3	+Vb	3	+Vb	3	+Vb	3	+Vb
4	+Vref	4	+Vref	4	+Vref	4	+Vref