MyChron Expansion

USER GUIDE - Release 1.04

MyChron5 and MyChron Expansion

This user manual explains how to use AiM MyChron Expansion with your MyChron5.

Firmware release from 1.24.14 or higher.

MyChron Expansion analog inputs

MyChron Expansion has 4 inputs, that can be connected to these sensors:

■ Throttle potentiometer
■ Brake potentiometer
■ Water temperature thermo resistance
■ Speed sensors
■ Steering angle potentiometers
■ Generic 0-100% sensors
■ Brake pressure sensors
■ Gas valve (AiM power valve)
■ Wheel temperature sensors
■ Generic 0-5V sensors

■ Channel 1 and 2 can also be connected to a digital speed sensor.

Each enabled channel is recorded at 20 Hz.

After having connected MyChron Expansion you need to configure MyChron5 in order to manage the sensors.

The steps to follow are:

■ choose the sensor connected to each channel

■ if necessary, configure the sensor, setting the proper parameters

■ if necessary, calibrate the sensors

■ configure the display custom page(s) where the information coming from the sensors will be shown.
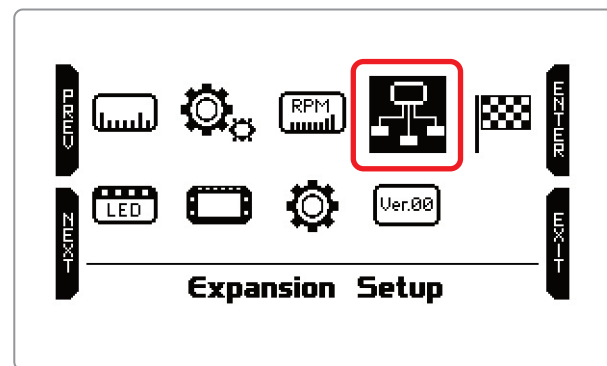
MyChron configuration

• Connect AiM MyChron Expansion to your MyChron5
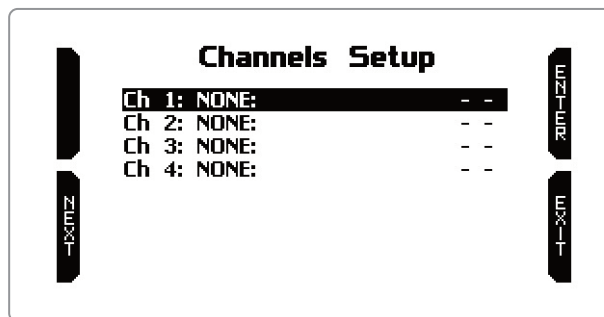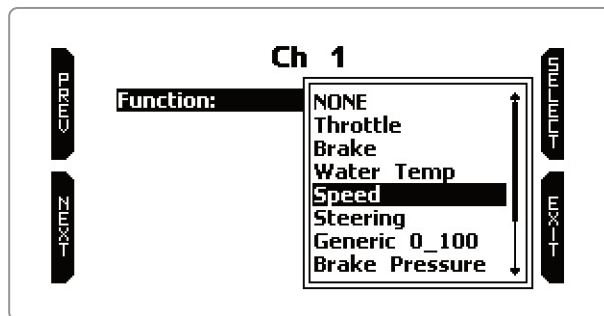• Press "MENU" –> "Config Params"
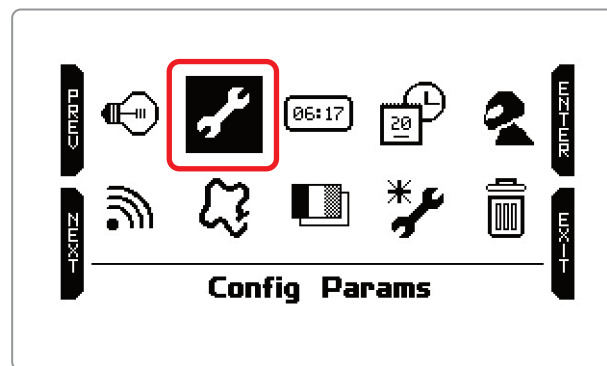
• in "Config Params" page press "Expansion Setup" icon.

• Press "ENTER"
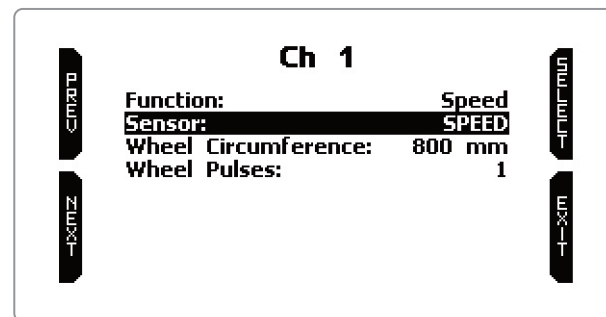
Pressing "ENTER" you reach this page.

Then you need to select the sensor type and other parameters possibly required.

Channels Setup

Ch 1: NONE:	- -
Ch 2: NONE:	- -
Ch 3: NONE:	- -
Ch 4: NONE:	- -

PREV / NEXT / ENTER / EXIT

Ch 1

Function:	Speed
Sensor:	SPEED
Wheel Circumference:	800 mm
Wheel Pulses:	1

PREV / NEXT / SELECT / EXIT

Press "ENTER" to set each channel function (i.e. speed)

When all channels have been set you are prompted to "Channels Setup" page, that now shows all the sensors you set.

Ch 1

Function:

NONE
Throttle
Brake
Water Temp
Speed
Steering
Generic 0_100
Brake Pressure

PREV / NEXT / SELECT / EXIT

Channels Setup

Ch 1: Speed:	0 km/h
Ch 2: Brake:	12%
Ch 3: Water Temp:	25°C
Ch 4: Gas Valve:	37 mm

PREV / NEXT / ENTER / EXIT
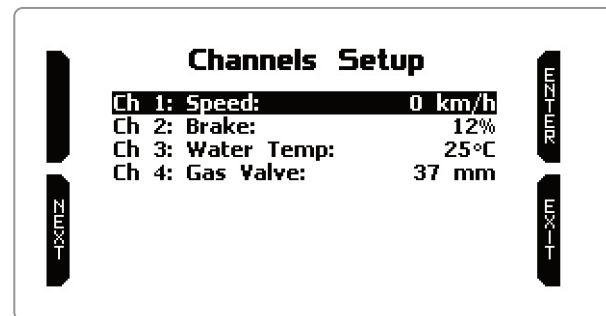
Selecting a sensor that needs to be calibrated "CALIB" pushbutton appears.

Channels Setup

CALIB	Ch 1: Speed:	0 km/h	ENTER
	Ch 2: Brake:	16%	
NEXT	Ch 3: Water Temp:	28°C	EXIT
	Ch 4: Gas Valve:	38 mm	
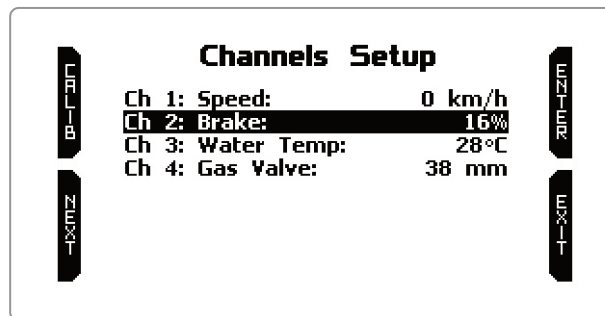
Push it, follow the instructions prompted on MyChron5 display and press "SAVE".

Calibration

Ch 2: Brake   2500 mV

0%   100%
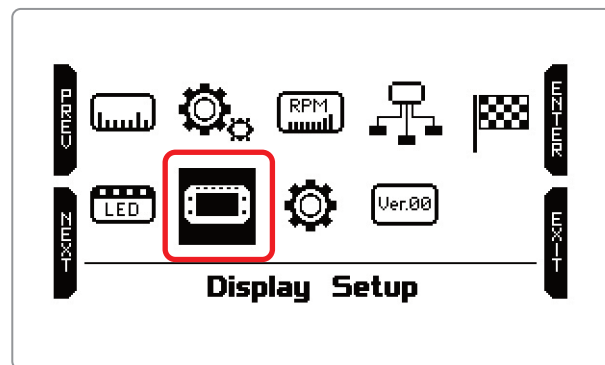
Move pedal to position max and min
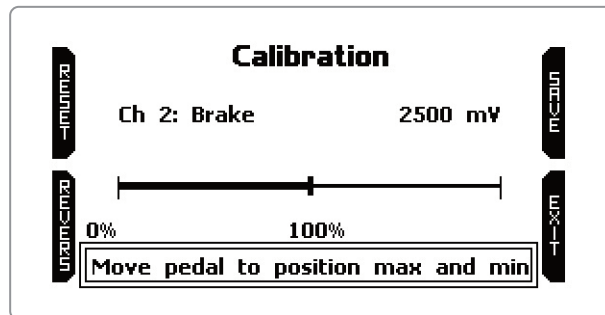
Press twice "Exit" to return to the new page with "Config Params" icon selected.
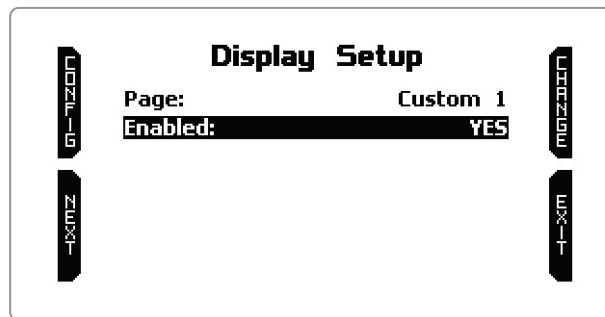
Display Setup

Once MyChron Expansion channels set you can also show them on MyChron5 custom pages.
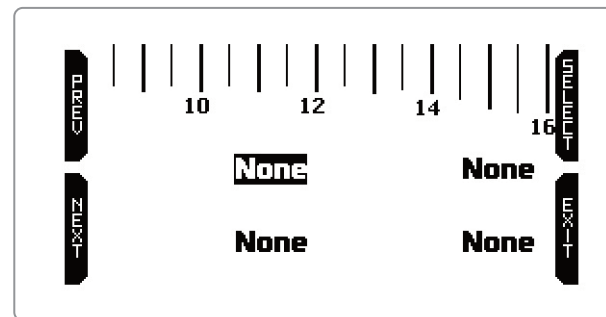In "Config Params" page scroll up to "Display setup" icon and press "Enter."

Display Setup

- ■ Select the Custom page where to show MyChron Expansion channels (i.e. Custom 1).
- ■ Enable the page
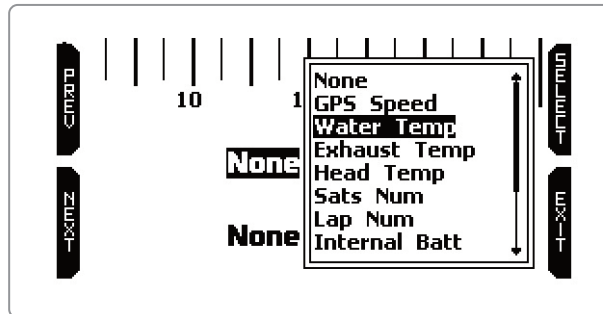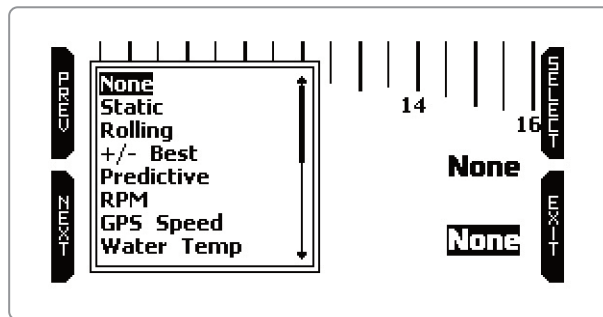- ■ Press "CONFIG"

Display Setup

Entering the Custom page you see RPM Bar graph on top and four fields set as None:

■ Three fields can be set only as measure field
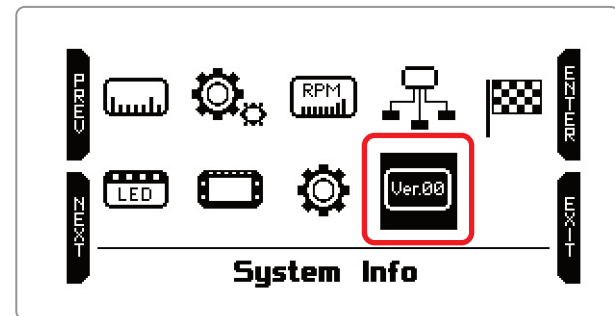■ Place the function you want to show in the field you prefer

■ The fourth field – bottom right – can be set either as lap time or as measure field. Lap time options are shown top of the list – see below

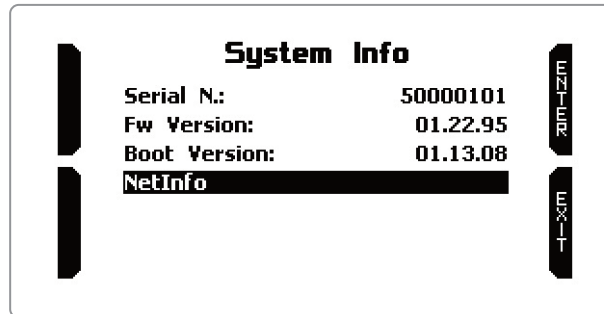■ Once all fields set press "EXIT"

Network Information

To know the firmware version of your MyChron Expansion go to "Config Params" page and press "System Info":

In "System Info" page:
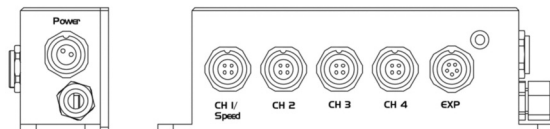
■ Select "NetInfo" option as here below
■ Press "ENTER"

```
            System  Info              E
      Serial N.:        50000101      N
      Fw Version:         01.22.95    T
      Boot Version:       01.13.08    E
      NetInfo                         R

                                      E
                                      X
                                      I
                                      T
```

Network Information

Network information page shows all expansions connected to your gauge as well as their serial number and firmware version.

```
              NetInfo
        myexp:      2303165 48.18.00      E
                                          X
                                          I
                                          T
```

Technical specifications
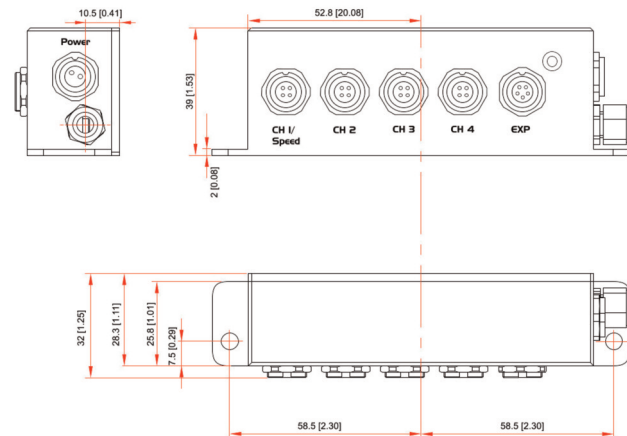

2 pins Binder 712
female conector pinout
front view

4 pins Binder 712
female conector pinout
front view

5 pins Binder 712
female conector pinout
front view

POWER	CH1	CH2	CH3	CH4	Exp
1 - +Vb ext 2 - GND	1 - Analog input 1 2 - GND 3 - +Vb 4 - +Vref	1 - Analog input 2 2 - GND 3 - +Vb 4 - +Vref	1 - Analog input 3 2 - GND 3 - +Vb 4 - +Vref	1 - Analog input 4 2 - GND 3 - +Vb 4 - +Vref	1 - CAN+ 2 - GND 3 - +Vb 4 - CAN- 5 - +Vbext

Sampling frequency	20 Hz
Dimensions	127x24x33 mm
Weight	194 g
Waterproof	IP65