

MyChron3 Dash

User Manual



Racing Data Power

INDEX

| | |
|---|-----------|
| Chapter 1 – The dash | 3 |
| 1.1 – Part number | 3 |
| Chapter 2 – MyChron3 Dash connection scheme | 4 |
| Chapter 3 – Menu functions | 5 |
| Chapter 4 – Data visualization while running | 8 |
| 4.1 – EVO3 Pro and EVO3 Pista without GPS expansion..... | 8 |
| 4.2 – EVO4 and EVO3 Pro/Pista with GPS expansion | 9 |
| 4.2.1 – GPS Signal and split times setting (EVO4, EVO3 Pro/Pista with external GPS) | 10 |
| Chapter 5 – Data recall | 12 |
| 5.1 – Key functions in data recall | 12 |
| Chapter 6 – MyChron3 Dash configuration | 13 |
| Appendix – Connection cable | 14 |

Chapter 1 – The dash

MyChron3 Dash is the perfect replacement of the stock dash and allows to show and customize **EVO3 Pro**, **EVO3 Pista** and **EVO4** channels with RPM, speed, engaged gear, temperatures, oil pressure, lap time, alarms, etc..., as well as all signals coming from the vehicle ECU.

MyChron3 Dash allows to show:

- speed;
- RPM (digital value and graph bar);
- shift lights;
- up to 4 configurable channels;
- channel alarm led;
- lap time;
- split time;
- best lap;
- GPS signal status (if present).

1.1 – Part number

MyChron3 Dash part number is:

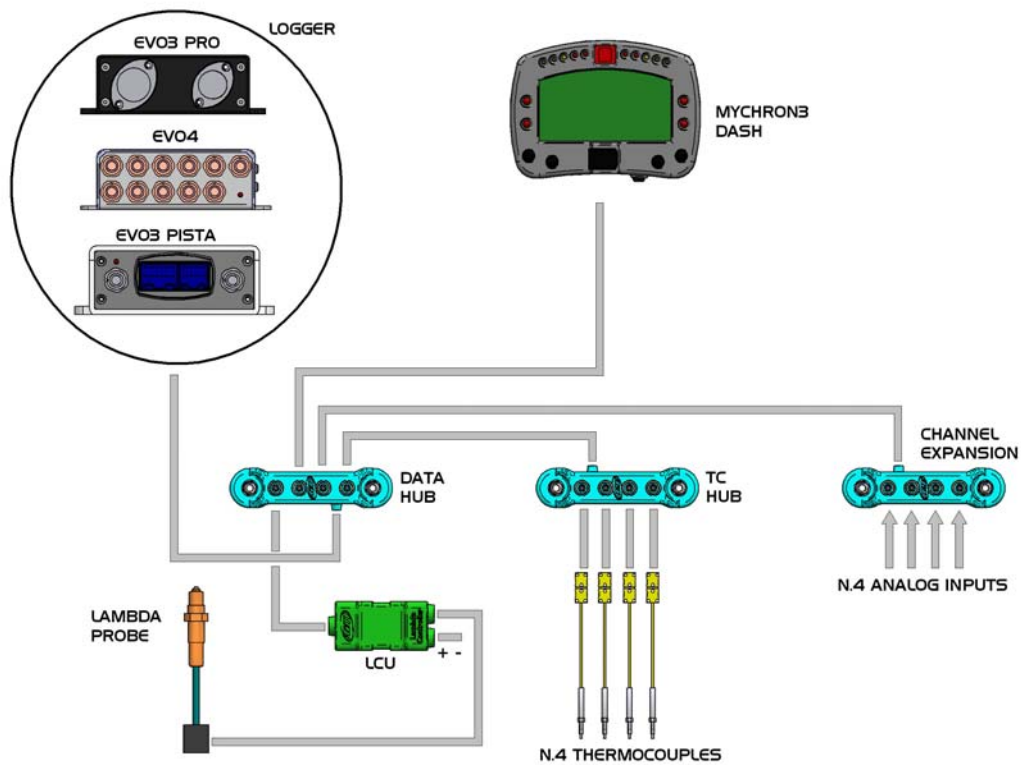
X30VDAM01

Chapter 2 – MyChron3 Dash connection scheme

To connect **MyChron3 Dash** to **AIM** loggers just plug the dash cable in the logger connector labelled “Exp.”

Warning: when connecting the Dash to the logger both devices must be OFF.

To connect other expansions additional to **MyChron3 Dash** an optional **Data Hub** is needed as shown here below.

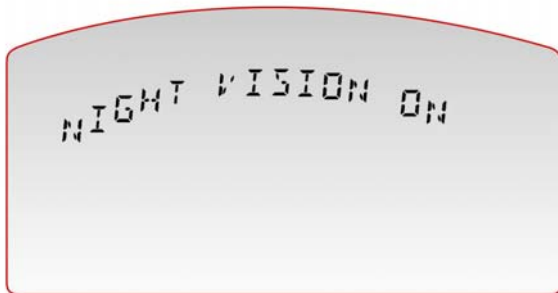


Chapter 3 – Menu functions

MyChron3 Dash menu functions are only accessible when the dash is not recording.

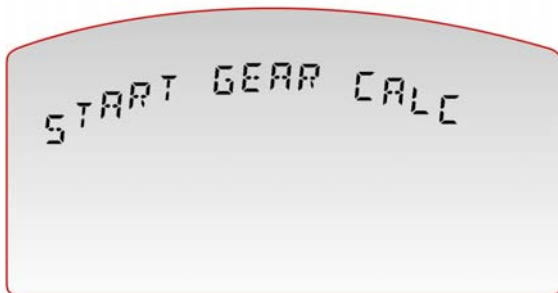
Warning: functionalities described in this tutorial have been implemented from firmware version 15.21 onward.

Pressing “**MENU/←**” button screens here below shown appears.



Night Vision (ON/OFF)

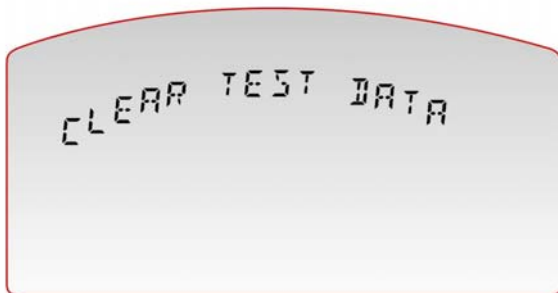
Shows display backlight status; press “**MEM/ok**” button to switch it on/off also while **EVO** is recording.



Start Gear Calc

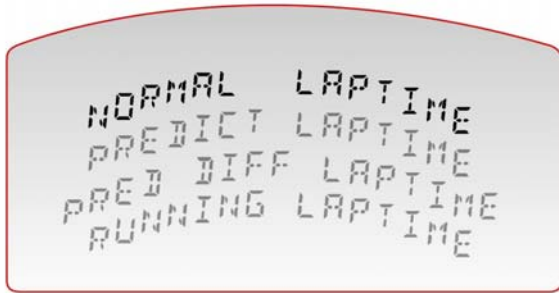
This screen only appears if master logger configuration expects calculated gears and it starts/restarts that computation.

To restart the computation the existing one is to be erased pressing “**MEM/OK**”; first “**Gear Calc Cleared**” and then “**Start Gear Calc**” appear. Powering on the vehicle the computation starts.



Clear Test Data (EVO4)

Erases data recorded on both **MyChron3 Dash** and **EVO4**. Press twice “**MEM/ok**” to clear.



Lap Time

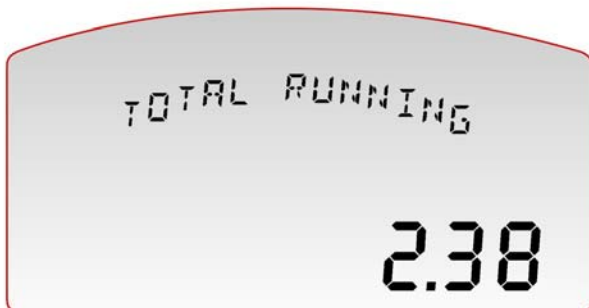
Shows the lap time visualisation set on the display. Use “MEM/ok” to switch from one setting to the other. Available options are:

- **Normal:** shows lap time;
- **Predict:** shows predicted lap time;
- **Pred Diff:** shows predicted lap time difference between the current lap and the best one of the current run;
- **Running:** shows time elapsed from the last lap/split signal.



Total Running (EVO3)

Shows non resettable total sampling time of the logger in minutes and hours on bottom (2.38) and partial one resettable on top (10); press twice “MEM/OK” to clear.



Total running (EVO4)

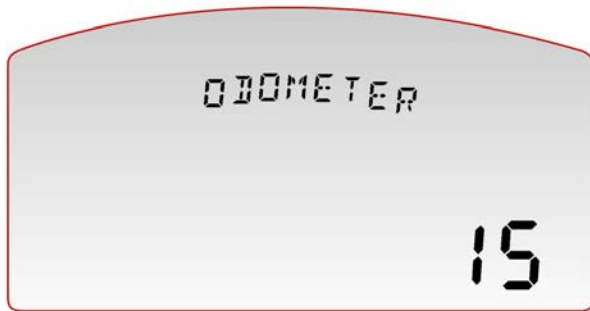
Shows in minutes and seconds (or hours and minutes when minutes overcome 59) the total working time of the master logger. Press twice “MEM/ok” to clear.



Odometer (EVO3)

Shows in minutes and seconds total non resettable run kilometres from the first acquisition on top (147) and partial since last reset on bottom (15).

To erase partial kilometres clear partial run kilometres in “Total Running” page.



Odometer (EVO4)

Shows total run kilometres of the master logger from the last reset. This measure is computed using the reference speed set on the master logger configuration. Press twice "**MEM/ok**" to clear.



Firmware Version

Allows to have information concerning firmware version (1) and logger serial number (2)

Chapter 4 – Data visualization while running

MyChron3 Dash shows instantaneously data sampled by the logger.

4.1 – EVO3 Pro and EVO3 Pista without GPS expansion

The main window shows:



RPM graph bar (1)

Three fields set by default (2) and shown in loop pressing “VIEW”:

- Speed (226 Km/h in the above figure).
- Best lap time;
- Digital RPM value;

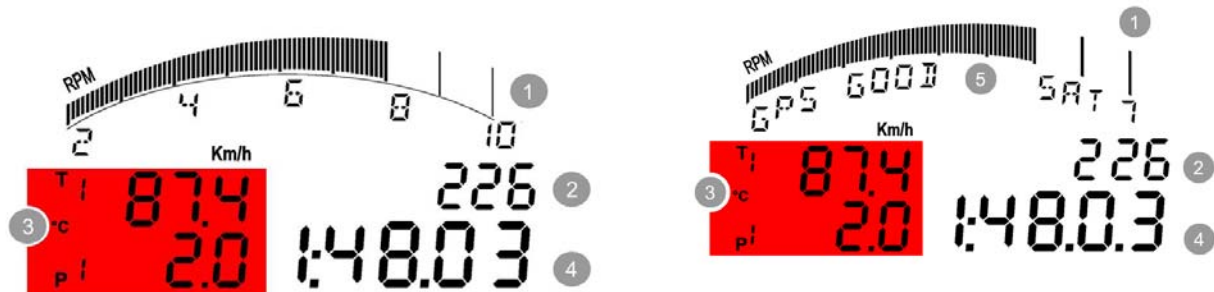
Four configurable fields (3) visible two by two (on the first and on the second page). To switch from first page to second one press “>>”.

In the above figure the shown channel is a temperature and T (field T1) appears beside the channel value. In case the channel shown is a pressure P (field P1) appears beside the channel value; in case other kind of channels are sampled the display shows only a numeric identifier.

Lap/split times (4): this information can be shown differently when master logger is **EVO4** as explained in chapter 3 (Lap Time).

4.2 – EVO4 and EVO3 Pro/Pista with GPS expansion

The images below show on the left the display main page in recording mode and on the right GPS diagnostic page reached using “VIEW” button:



RPM graph bar (1);

Five fields set by default (2) and visible in sequence:

- Digital RPM value
- Best lap time
- Speed (226 Km/h in the above figure)
- GPS Signal status
- Lap and split settings

Four configurable fields (3) visible two by two (on the first and on the second page). To switch from the first page to the second one press “>>” button.

In the above figure the shown channel is a temperature and T (field T1) appears beside the channel value. In case the channel shown is a pressure letter P (field P1) appears beside the channel value; in case other kind of channels are sampled the display shows only a numeric identifier.

Lap/split time (4);

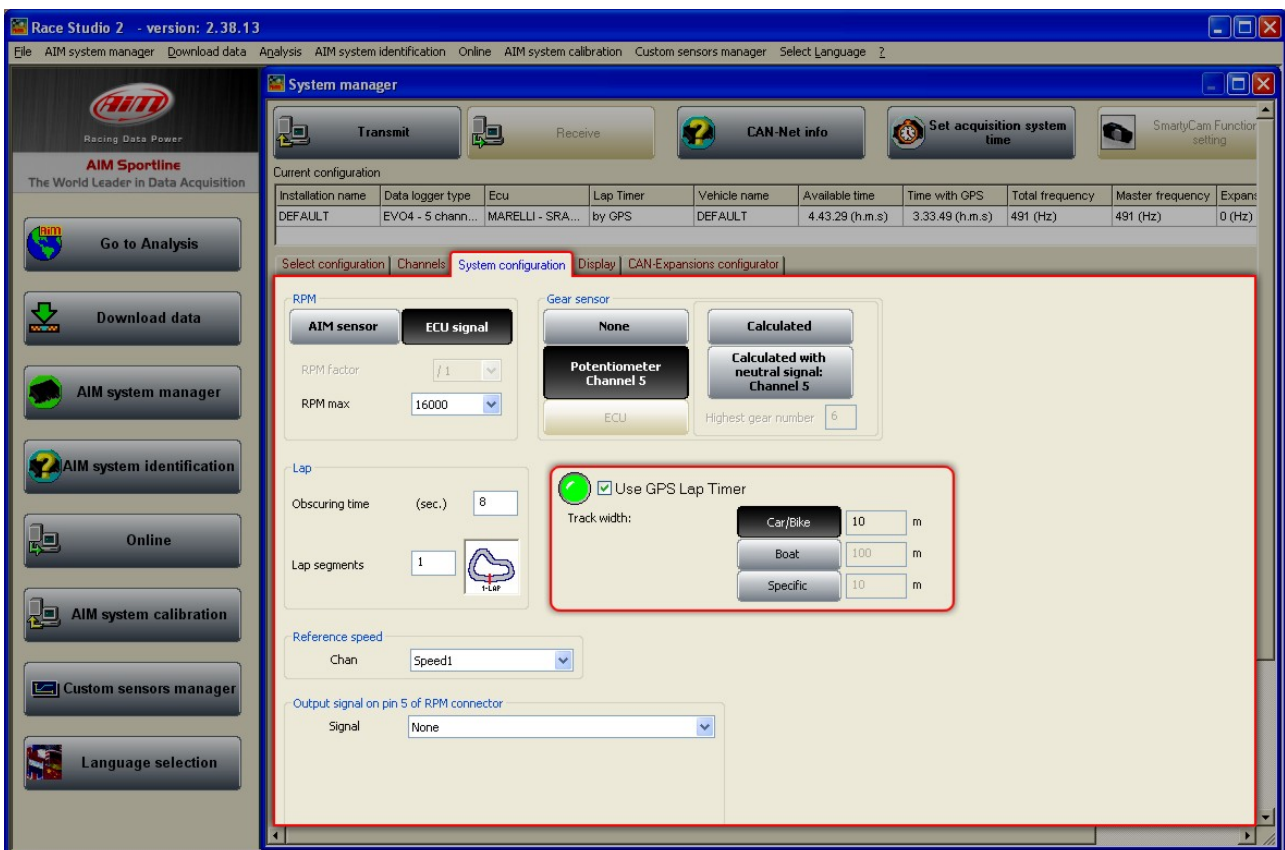
GPS signal status (5);

4.2.1 – GPS Signal and split times setting (EVO4, EVO3 Pro/Pista with external GPS)

GPS lap timer allows to record lap/split times with no need of transmitter/receiver.

It is possible to set lap and split directly through the logger (**EVO4, EVO3 Pro/Pista with external GPS¹**) following the procedure explained in these pages.

Warning: setting “Use GPS Lap timer” in system configuration layer of Race Studio Configuration – as shown here below – the logger will automatically sample lap and split time using only the GPS lap timer and the optical receiver, also if connected, is disabled. The below image shows EVO4 System configuration layer.



To set Lap and Split times using the GPS Laptimer:

- set GPS lap timer in **Race Studio 2** and transmit the configuration to the logger (see **Race Studio Configuration** user manual for further information on AIM loggers configuration).
- press “**VIEW**” on **MyChron3 Dash** until “**OK SET GPS MARKER**” appears (see below).

¹ External GPS is to be connected and **EVO3 Pro/Pista** configuration must include an external **GPS Module** as CAN expansion. See **Race Studio Configuration** user manual for further information about how to configure AIM loggers and their CAN expansions.



OK SET GPS MARKER

Press “MEM/OK” button to start lap/split setting procedure.

- Enter the track with the vehicle and choose the physical points where to fix laps and splits and follow this procedure.



OK TO SET SPLIT 1

This page appears only in case splits have been set in configuration and appears as many time as many split have been set.

Press “MEM/OK” on **MyChron3 Dash** in the point where the split is to be fixed.



OK TO SET LAP

Press “MEM/OK” button in correspondence of the point where the lap marker is to be set.



GPS MARKER END

This page means GPS lap timer setting is over and it appears only if the setting procedure has been successful.



GPS ERROR

In case during GPS Lap timer setting there is a lack of satellite signal for any reason, the display shows GPS ERROR and the procedure is to be repeated.

Chapter 5 – Data recall



When the session is over it is possible to recall stored data pressing “**MEM/OK**”. The display shows test and lap number the data refer to under the RPM Bar graph (in the above image: “TEST 02 – LAP 001”).

First shown page is best lap of the last test.

Bottom right box shows lap time of each lap of all sessions.

Best lap time of each session blinks.

5.1 – Key functions in data recall

“**MEM/OK**” enters data recall.

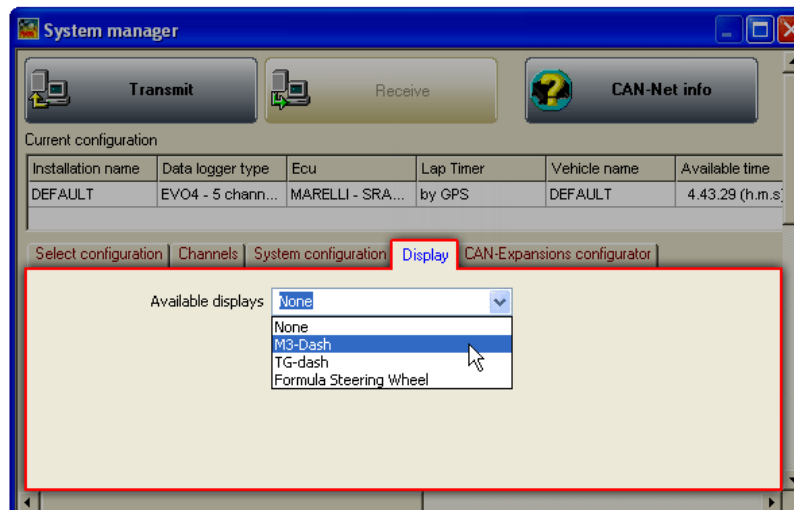
- “>>”, “**MENU/**<<” scroll between all test laps of the session.
- “**VIEW**” shows max RPM digital value and max speed value of the shown lap. Pages are shown in loop, to say in circular sequence.
- “**MEM**” shows max and min values of the selected lap for all channels shown by Mychron3 Dash.

NOTE: transmitting a new configuration to the logger all recorded data are deleted.

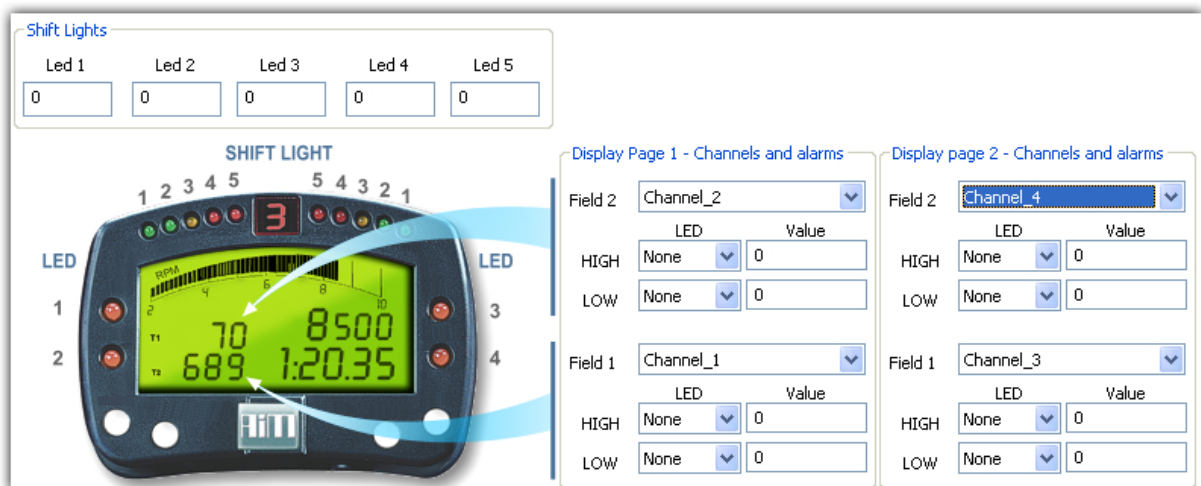
Chapter 6 – MyChron3 Dash configuration

To configure **MyChron3 Dash**:

- run **Race Studio 2** software.
- select the logger **MyChron3 Dash** is connected to pressing the corresponding button on the software left vertical keyboard.
- activate “display” layer and this window appears:



- click on “Available displays” drop down menu and select **M3-Dash**.

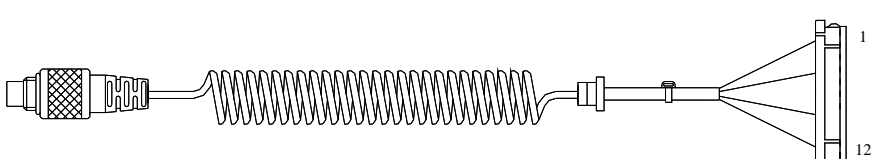
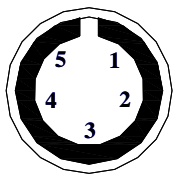
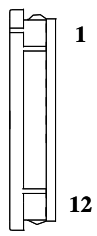



The configuration window is shown here below and sets:

- Shift lights values.
- Channels and alarm 1 and 2 of pages 1 and 2; this means that it is possible to set the four channels displayed (two by two) by **MyChron3 Dash** and link their Max and Min threshold values (Max/Min cases) to two led that switches on when these threshold values are reached.

Please note: “RPM scale”, “Split Number” and “Speed” setting (shown in data visualization), is made through “System Configuration” layer.

Appendix – Connection cable

| N. rev. / Rev. N. | Descrizione / Description | Data / Date | Firma / Signature | Contr. da / Ckd. by | | | | | | | | | | | | | | | | | | | | |
|--|---------------------------|---|------------------------------|---------------------------------|---|-------|--------|---|---|-------|-----|----|---|--------|------|----|---|-------|--------|---|---|------|--|--|
| <h3 style="margin: 0;">Cable for MyChron3 Dash EVO3 Pro/Pista, DaVid Stand Alone</h3> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;">  <div style="text-align: right;"> <p>12 pins Hirose female connector</p> </div> </div> <p style="margin-top: 10px;">5 pins Binder 712 male connector</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <h4 style="margin: 0;">Cable connection on Binder connector</h4> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>5 pins Binder 712 male connector Solder side view</p> </div> <table style="width: 80%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">1</td> <td style="width: 40%; border-bottom: 1px solid black;">WHITE</td> <td style="width: 40%; text-align: center;">CAN 0+</td> <td style="width: 15%; text-align: center;">9</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="border-bottom: 1px solid black;">BROWN</td> <td style="text-align: center;">GND</td> <td style="text-align: center;">12</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="border-bottom: 1px solid black;">YELLOW</td> <td style="text-align: center;">+ Vb</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="border-bottom: 1px solid black;">GREEN</td> <td style="text-align: center;">CAN 0-</td> <td style="text-align: center;">8</td> </tr> <tr> <td style="text-align: center;">5</td> <td>n.c.</td> <td></td> <td></td> </tr> </table> <div style="text-align: right;">  <p>12 pins Hirose female connector Top view</p> </div> </div> | | | | | 1 | WHITE | CAN 0+ | 9 | 2 | BROWN | GND | 12 | 3 | YELLOW | + Vb | 10 | 4 | GREEN | CAN 0- | 8 | 5 | n.c. | | |
| 1 | WHITE | CAN 0+ | 9 | | | | | | | | | | | | | | | | | | | | | |
| 2 | BROWN | GND | 12 | | | | | | | | | | | | | | | | | | | | | |
| 3 | YELLOW | + Vb | 10 | | | | | | | | | | | | | | | | | | | | | |
| 4 | GREEN | CAN 0- | 8 | | | | | | | | | | | | | | | | | | | | | |
| 5 | n.c. | | | | | | | | | | | | | | | | | | | | | | | |
| Rif. / Ref. | Q.tà/Q.ty | Material / Material | N. articolo / Item N. | | | | | | | | | | | | | | | | | | | | | |
| Progettato da / Designed by | Contr. da / Ckd. by | Approvato da / Approved by | Nome file / File name | Data / Date | | | | | | | | | | | | | | | | | | | | |
|  | | Titolo / Title Cavo MyChron3 Dash, EVO3 Pro/Pista, DaVid Stand Alone | | | | | | | | | | | | | | | | | | | | | | |
| | | N. disegno / Drawing N. 04.555.08 | Rev. / Rev. Rev. 3 | Foglio / Sheet 1 of 1 | | | | | | | | | | | | | | | | | | | | |