Racing Data Power

Motorsport Racing Guide

***AIM is the n°1 brand in Data Acquisition Systems in the SCCA (Sports Car Club of America) championships, with a 25,6% market share.**

Source: SCCA Membership Demographic Profile - March 2006

AIM is one of the world leading companies in Data acquisition for Racing applications*.

Established in 1976, for almost 20 years AIM worked in developping solutions for Data acquisition systems and process control in the industrial environment.

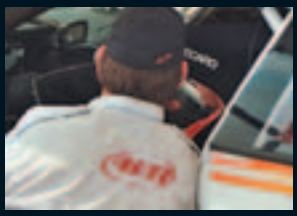
In 1994 AIM developped its first data logger for car application, Rasti, that can be considered the forerunner of the current production.

In the following years other products were designed and launched, from Drack to the MyChron family, until DaVid - the new AIM Data Video Recording System - and the newest GPS module (2007).

Different products for different applications, with the same common factor: great innovation ability.
AIM develops winning technical skills in the Racing world, setting new standards in many application fields: from Kart to Auto, Bike, Jr. Dragster and even Formula1 Motor Boat and Snowmobile!
Each AIM system is totally designed, manufactured and tested by its technicians.

The R&D team is composed of electronic and mechanical engineers, physicists and other specialists, who develop firmware, software, hardware and the related documentation.

Today, AIM is at the leading edge in Racing Technology.



Racing Data Power


SOFTWARE >>>
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GEAR
LAGUNA SECA
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MENU | --- | MEM | VIEW
MENU / <<
>> / OFF
RPM
SPEED
TEMP

MYCHRON LIGHT TG

MYCHRON3 GOLD

MYCHRON3 XG LOG

EVO3 PRO

MXL

STEERING WHEEL

LCU-ONE

GPS

DAVID

MYCHRON 660

EVO3 QM - MXL QM

MULTICHRON

Racing Data Power

MYCHRON LIGHT TG

Features

- Dimensions 82 x 62.5 x 24.5 mm (3.2 x 2.5 x 1 inches)
- Backlight feature (optional)
- Power supply: internal - 6 V, or external from 7 to 15 V
- Built - in clock, calendar and database for laps management
- Lap times histogram and theoretical best laptime analysis feature
- Optional USB cable for gauge configuration, data download and firmware upgrade
- 128 KB non-volatile internal memory
- Water resistant

Perfect for motorcycles, cars, track days and hot laps.

"From an informational stand point, segment times are an accurate way to determine a rider's specific strengths and whether or not adjustments are needed."

Conrad Young,
AMA Supercross/Motocross
Timing and Scoring Manager.

MyChron Light TG is a compact digital laptimer designed for motorcycle and car racing.
It's a portable laptimer that mounts "on board" on the handlebars of a motorcycle or the dash of a race car.

MyChron laptimers have been considered standard equipment in motorcycle racing for nearly a decade. MyChron Light TG is simply designed to be the best laptimer on the marketplace: it's widely quoted as a great tool for monitoring the driver's performance.
The optional USB cable (300 kb/sec) will allow the user to download data to a PC and use the LightAnalyzer to review the data.

Segment Timing Used by the AMA

One benefit of the segment system is to help teams better analyze bike set-up and make competitive adjustments by isolating distinct sections of a race track. For example, a team can determine how its rider is doing specifically in the whoop section compared to other riders.

SuperMoto

"..the ticket to faster lap times"

MYCHRON3 GOLD

Features:

- Water resistant, wide display with backlight
- RPM graphical and numerical view
- Configurable RPM scaling
- 1 speed and up 4 analog channels
- Gear number: calculated or sampled from "on-board" sensor
- 10 shift lights: Green - Yellow – Red
- 4 freely configurable max/min alarm lights
- Lap times – configurable Split times, through infrared RX TX
- Internal data acquisition system with 8 MB non volatile memory
- Total and partial (resettable) odometer

Simple, user friendly, cost effective dash logger

RPM, speed, lateral accelerometer (external gyro sensor for bikes) using a last generation software.

It also includes 4 fully configurable analog inputs: temperature (thermocouples - thermoresistors), pressure (Oil – Fuel - Airbox), potentiometers (pedals or steering angle), lambdas, on-board and custom sensors.

With a beautiful display, MyChron 3 Gold features a backlight and a high speed USB data download to a PC: these data may be analyzed with the AIM Race Studio 2 software.

With 8 MB of memory, the MyChron 3 Gold can record a huge amount of data.
Its internal lateral g-sensor lets you create the track map, when you download the data to your PC.

HOT ROD

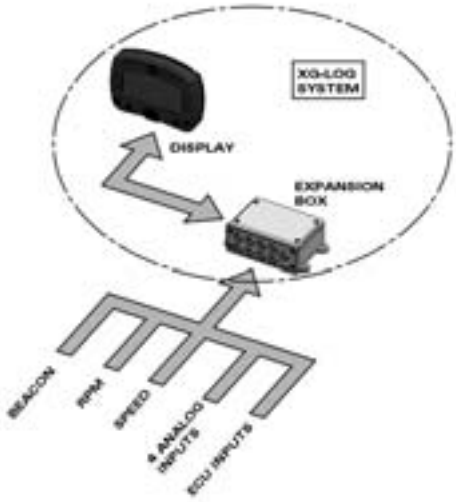
"MyChron Gold data logger puts the power of information in the palm of your hand"

Matt King

MYCHRON3 XG LOG

Features

- Water resistant, wide display with backlight
- RPM graphical and numerical view
- Configurable RPM scaling (from 4.000 to 20.000 end of scale)
- 2 speeds and up to 5 analog channels
- Gear number: calculated or sampled from "on-board" sensor
- CAN protocol for external "expansion modules"
- 10 shift lights: Green - Yellow – Red
- 4 freely configurable max/min alarm lights
- Lap times – configurable Split times, through infrared RX TX
- Internal data acquisition system with 8 MB non volatile memory
- Total and partial (resettable) odometer



MyChron3 XG Log is a compact, high value-for-money gauge, particularly suited to be installed on the steering wheel.

Thanks to its lightweight dash and external "junction box", MyChron 3 XG LOG is extremely versatile: can be applied in touring cars as well as formula cars.
The "Junction box" includes a lateral g-sensor for track mapping.

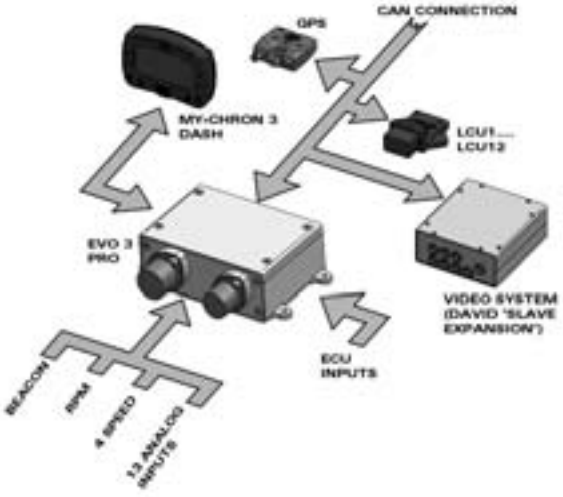
Easy Connection Technology through CAN or RS232 to your ECU to receive a huge amount of information.

EVO3 PRO

Features

- Water resistant
- Rugged and lightweight aluminium chassis
- CAN protocol for external "expansion modules"
- Lap times –through infrared RX TX
- 16 MB non volatile memory
- 12 analog channels
- 4 speed inputs
- Up to 5 kHz sampling (1000 Hz for single channel)
- Can do track mapping using internal lateral g-sensor or our powerful GPS module
- Dimensions: 101x39x71 mm. (3,98x1,53x2,79 inches)

Powerful, compact, easily connectable to many ECUs, expandable data-logger.



MXL

Features

- Water resistant, extra-wide display with backlight
- Rugged and lightweight aluminium chassis
- Configurable RPM scaling
- Gear number
- CAN protocol for external "expansion modules"
- 10 shift lights:
- 6 freely configurable max/min alarm lights
- Lap times
- Internal data acquisition system
- Up to 2 kHz sampling
- Total and partial odometer
- Dimensions: 174x110 mm. (6,8 x 4,3 inches)
- 8-16 MB non-volatile internal memory

- Optional GPS Module

Wide Display dash logger

MXL is a powerful, professional and high-tech gauge which allows the user to sample and display a large number of parameters.

MXL includes a tachometer, 1 RPM input, 8 to 12 analog inputs (temperatures, pressures, potentiometers, accelerometers, gyros, lambdas, "on-board" and custom sensors), 1 to 4 speed input, gear and lap time.

With a beautiful and wide display, MXL has got a backlight and a high speed USB data download to a PC: these data may be analyzed with the powerful Race Studio 2 software.

It can be a part of a network of AIM products such as (see through) GPS module, lambda controllers LCU-ONE or DaVid video system.

Easy Connection Technology through CAN or RS232 to your ECU to receive a huge amount of information.

MXL versions
MXL is available in 3 versions:

Pro
(4 speeds, 12 analog inputs)

Pista
(1 speed, 8 analog inputs, AMP connectors)
Strada
(same as Pista, no sampling capability)

STEERING WHEEL CAR

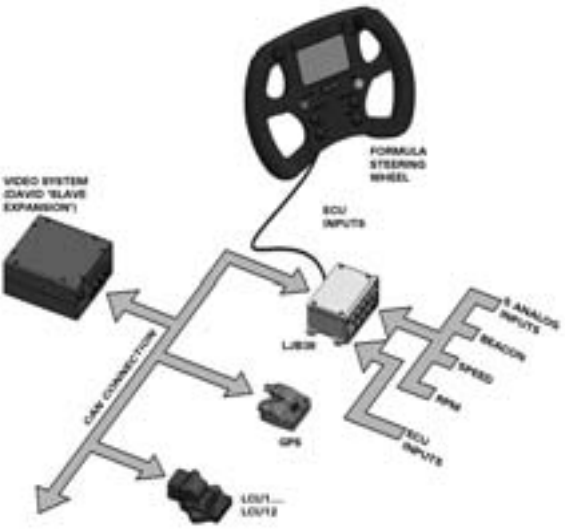
Features

- Receives, records and shows data coming from up to 13 analog inputs,
- 2 speed inputs, RPM, lap time.
- Connectable to your ECU via CAN or RS232 for receiving engine information
- Expandable for getting GPS information, Lambda values and more.
- Housing:Carbon fiber and aluminium
- Dimensions: 280 x 230 mm. (11 x 9 inches)
- Grip: Suede leather – Anti skid

Technology in your hands

A High Technological steering wheel that, thank to its 128x64 matrix dash, can give the driver all the important information: lap times, rpm values, speed and alarm information.

Of course, you can download the data recorded to your PC for evaluating them thanks to AIM Race Studio 2 Software.



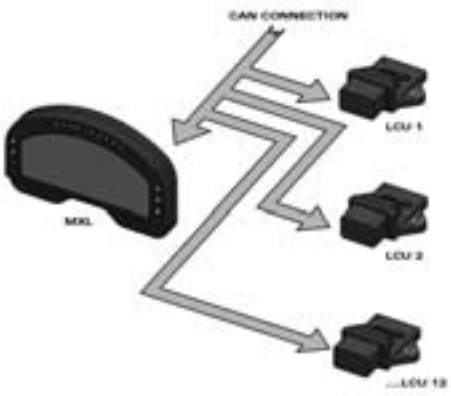
LCU-ONE

Features

- Fully configurable analog output
- CAN connection/Analog output
- Lambda value and Air Fuel Ratio
- User defined Stoichiometric point
- Works with Bosch Lambda sensor 4.9

Your Engine under control

The LCU-ONE is a wide band controller for the BOSCH LSU 4.9 Lambda sensor, well suited for gasoline, diesel and nitro methan engines.
This module is to be intended to control the Lambda sensor and to measure the AIR/FUEL ratio (AFR) or Lambda value for an engine.
Both analog and CAN outputs are provided for Lambda and AFR.
A dedicated software can be used to configure the module and for receiving the data directly on the PC.

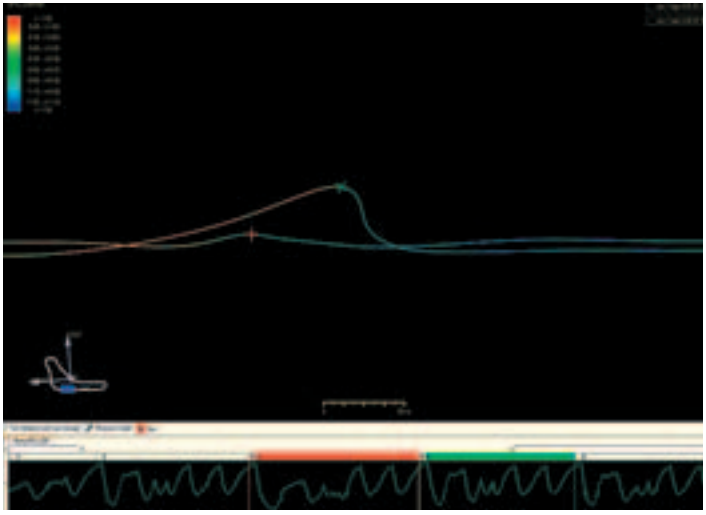


GPS MODULE

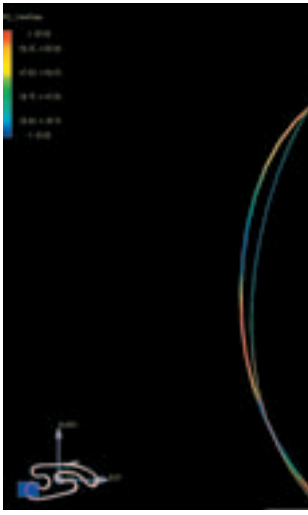
Features

- Connectable via CAN to AIM MXL and EVO3 Pro systems
- Position
- Speed
- Yaw rate
- Lateral G – Linear G
- Automatic lap times

The state of the art in Racing Car Evaluation



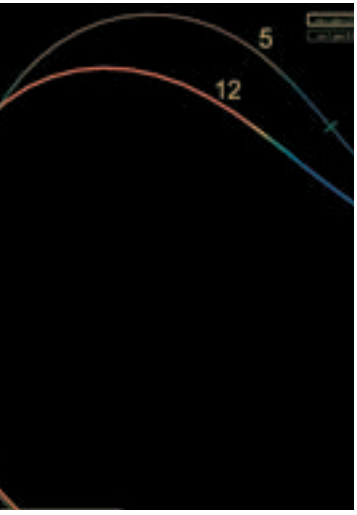
Record your mistakes!



Compare two laps, evaluat

Export your GPS data and see your position in Google earth!

Nurburgring track



ing positions and speeds

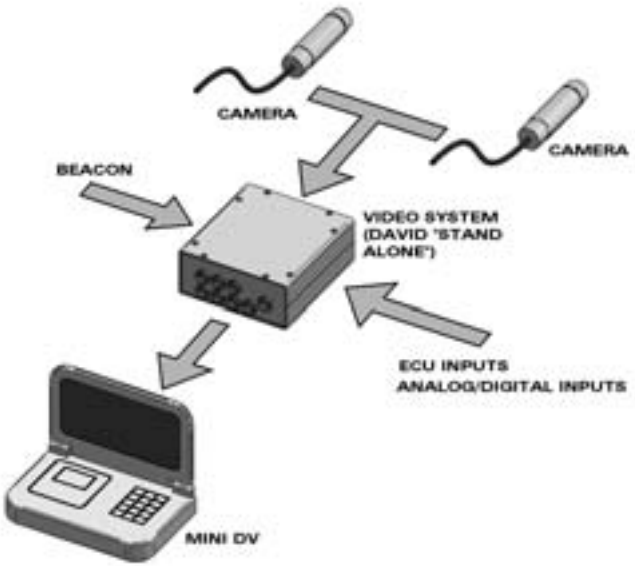
Easy speed evaluation

DAVID

DaVid captures the images from 2 different cameras and merge them with data coming from the sensors. The resulting movie can be recorded on VHS, DVD or solid state memory.

Available in two different versions: as a slave, connected by Can to a Logger (MXL or EVO3 Pro) or as a stand alone unit.

Use DaVid to document your track performance!



DaVid combines AIM proven data logging technology with innovative video techniques.
Easily review previous driving sessions with the most important information right in front of you: RPM, speed, brake and throttle position, gear, lateral and longitudinal g force, and laptime.
DaVid is flexible: a slave expansion mode connects to our MXL data logger via the CAN interface, allowing to build upon an existing MXL installation.

Easy Connection Technology through CAN or RS232 to your ECU to receive a huge amount of information.

All signals shown on the dash are received via a single connection(CAN or RS232).
DaVid analog inputs are extremely flexible and can suit any situation.
A set of sensors allows to work without compatibility problems.
Video output can be either PAL or NTSC.
For driver coaching, DaVid is an invaluable tool for training and review.

Racetracks and event promoters will enjoy using DaVid to create compelling souvenirs for race events and corporate promotions, as well as provide exciting in-car views for broadcast

Revisit your race on your TV!

MYCHRON3 660

Racers Trust MyChron

"I have found the AiM Sports MyChron3 660 to be the absolute finest tuning tool ever developed for junior drag racing.

It definitely puts all the others "back on the trailer".

Thank you for building such a high quality (and rugged) instrument."

Eric Kraft

The most powerful data logger and gauge designed for Jr. Drag Racing

The MyChron3 660 records Engine RPM, Jack Shaft RPM, Wheel Speed in MPH, Exhaust Gas Temperature, Cylinder Head Temperature, CVT, Overdrive Percentage and Linear Acceleration in G-forces.
All legal by current NHRA rules.
The MPH is calculated by jack shaft RPM and gear ratio, CVT and overdrive percentage are product of engine RPM and jack shaft RPM, linear g-force is a derivative of wheel speed or rate of acceleration.

Each channel is recorded 20 times per second (20Hz) for an amazing total of 160 samples per second (160Hz).

It offers a lot of features for better evaluating the behaviour of your Jr Dragster:

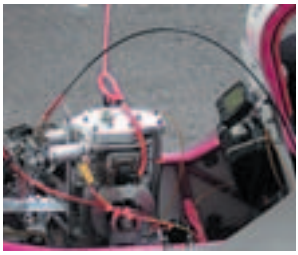
Steady Stage

MyChron 3 660 has an RPM display stabilizer: automatically invoked below 5000 RPM, the RPM stabilizer will slow and average the engine RPM on the display.
The result is a much more steady and consistent number for your carburetor tuning.

Real Time Display

In the real time view the Engine RPM's are displayed both in a beautiful graphical form across

JUNIOR DRAGSTERS



the top of the gauge as well as a large digital number below and right.

Thanks to the RPM Stabilizer, these numbers are smooth and steady.

In the lower left is both your cylinder head temperature and your exhaust gas temperature, labeled TC and TE.

Post Run Review

With the press of a single button, you'll get your maximum engine RPM, maximum jack shaft RPM, maximum temperatures, total recorded run time and much more.

Drag Racing Software

We have written new software specific to analyzing drag racing data, Drag Analyzer.

We've focused on usability and ease of use, minimizing the number of clicks it takes for you to get the information you need, and get it quickly.

Built in Clock and Calendar

We've built a clock and calendar into every MyChron3 660, not to replace your desk clock, but to time and date stamp every run you make.

EVO3 QM - MXL QM

Features EVO3 QM

- Water resistant
- Rugged and lightweight aluminium chassis
- CAN protocol for external "expansion modules"
- External switch for start acquisition
- 16 MB non volatile memory
- 12 analog channels
- 4 speed inputs
- Up to 5 kHz sampling (1000 Hz for single channel)
- Dimensions: 101x39x71 mm. (3,98x1,53x2,79 inches)

EVO3 QM

MXL QM

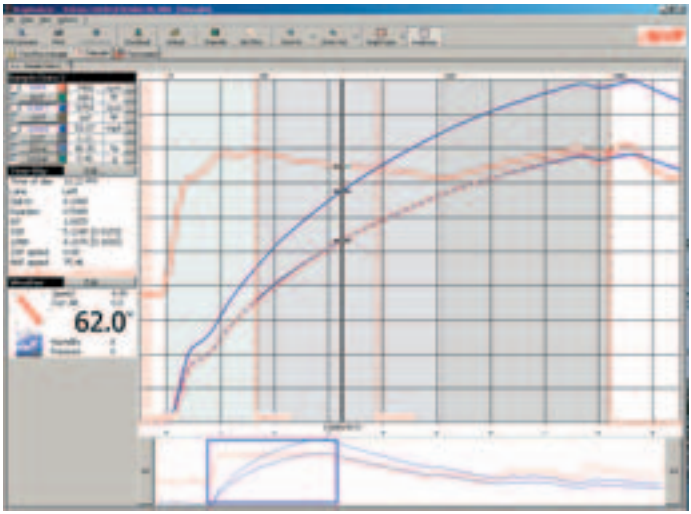
Aim proposals for Drag Racing World
The Data Logger EVO3 QM and the Dash Logger MXL QM are powerful, high technological products that have been designed exclusively for the dragster world.

Both are expandable (Lambda modules, expansion modules, add on displays) connectable to the ECUs for receiving data from them and fully configurable through a dedicated software.
Our Analysis software DragAnalyzer 2, let you evaluate your Dragster in an extremely professional way.

DRAG RACING

Features MXL QM

- Water resistant, extra-wide display with backlight
- Rugged and lightweight aluminium chassis
- external switch for start acquisition
- Configurable RPM scaling
- Gear number
- CAN protocol for external "expansion modules"
- 10 shift lights:
- 6 freely configurable max/min alarm lights
- Internal data acquisition system
- Up to 2 kHz sampling
- Dimensions: 174x110 mm. (6,8 x 4,3 inches)
- 8-16 MB non-volatile internal memory



Easy Connection Technology through CAN or RS232 to your ECU to receive a huge amount of information.

MULTICHRON

MultiChron stopwatch is a versatile hand-held digital lap timer suited for any racing situation that tracks up to four different racers simultaneously.

Its generous memory lets quickly see best laps and scroll through all of the laps to review the race up to 99 laps per driver.

And up to 9 splits per competitor per lap.

Times Up to 4 racers at one time

With a rugged, attractive case, and bright display, MultiChron is available in various colors including Titanium, Black, Yellow, Red (translucent) and Blue (translucent).

Aim and Fame

Racing Data Power

Formula Renault 2000
Evo3: only allowed data logger since 2000

EVO3

New Zealand Formula Toyota
First equipment: MyChron3 XG Log


sparco
YOTA

XG LOG

U.S and Italian Sport Cars Championships
Picchio Team


SERVICES
MXL

Seat Motorsport
First Equipment: MXL


REPSOL
DUNLOP
REPSOL
DUNLOP
Carrier
Carrier

MXL

3
18:35
32
845
CH_3 326 CH_4 670


7
GT3
96
GT3


MXL


XG LOG


DAVID

IMSA GT3 Cup Challenge
Porsche GT3

SCCA Mazda MX-5 Cup


56
MAZDASPEED
HANKOOK
MXL


MXL

Grand-Am Cup
Ford Mustang - PlayBoy Racing Team

Japanese SBK Championship
Suzuki-Yoshimura Factory Team
Technical Partner

MXL

STK600 World Championship
Lorenzini by Leoni Team


MXL

Sidecar European Championship


8

MXL

Sirg Schutzbach
2003 Speedway European Champion

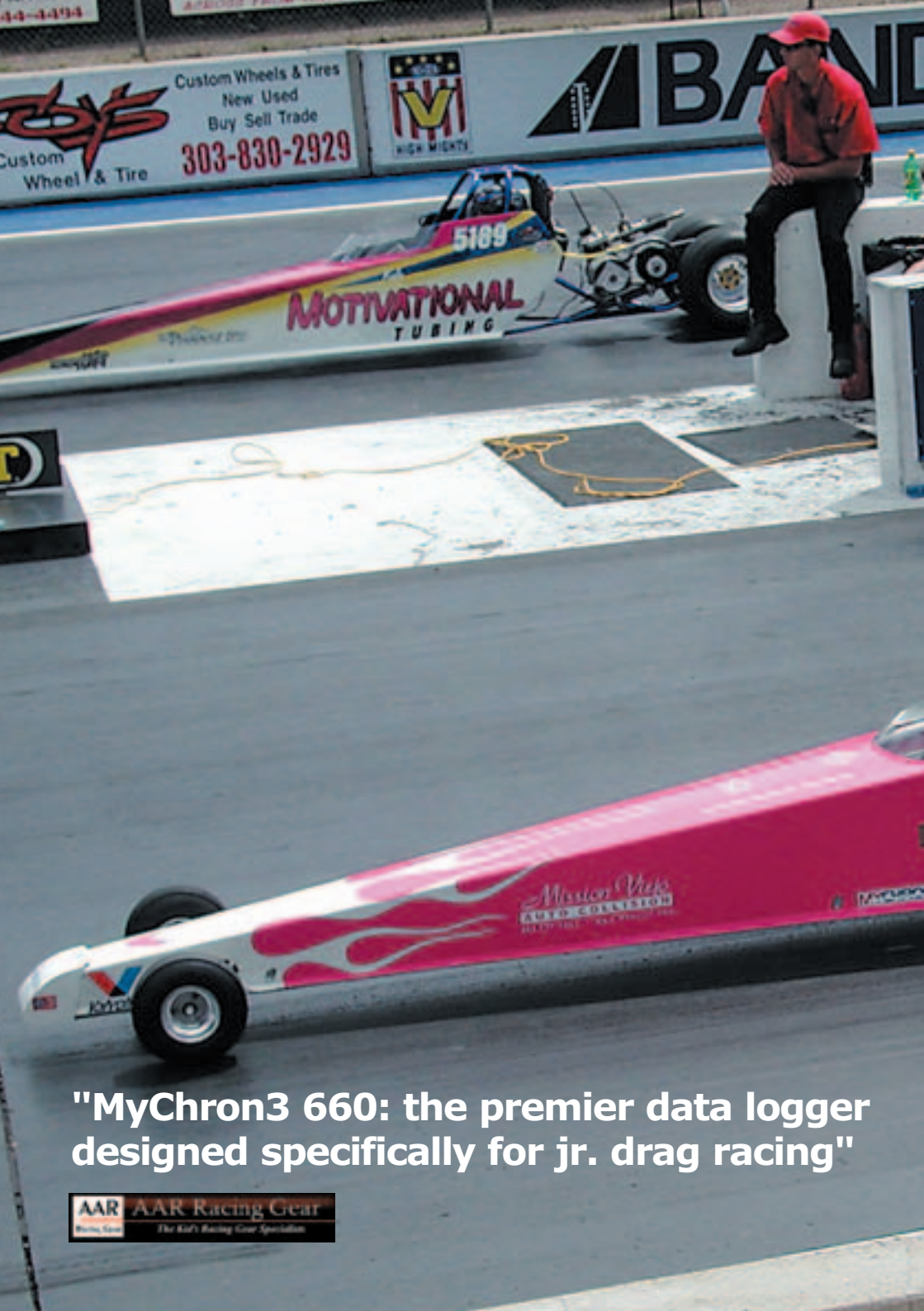

EVO3

Andrew Caddell Mazda MX5
2006 Spec Miata U.S. Champion


SCCA
88

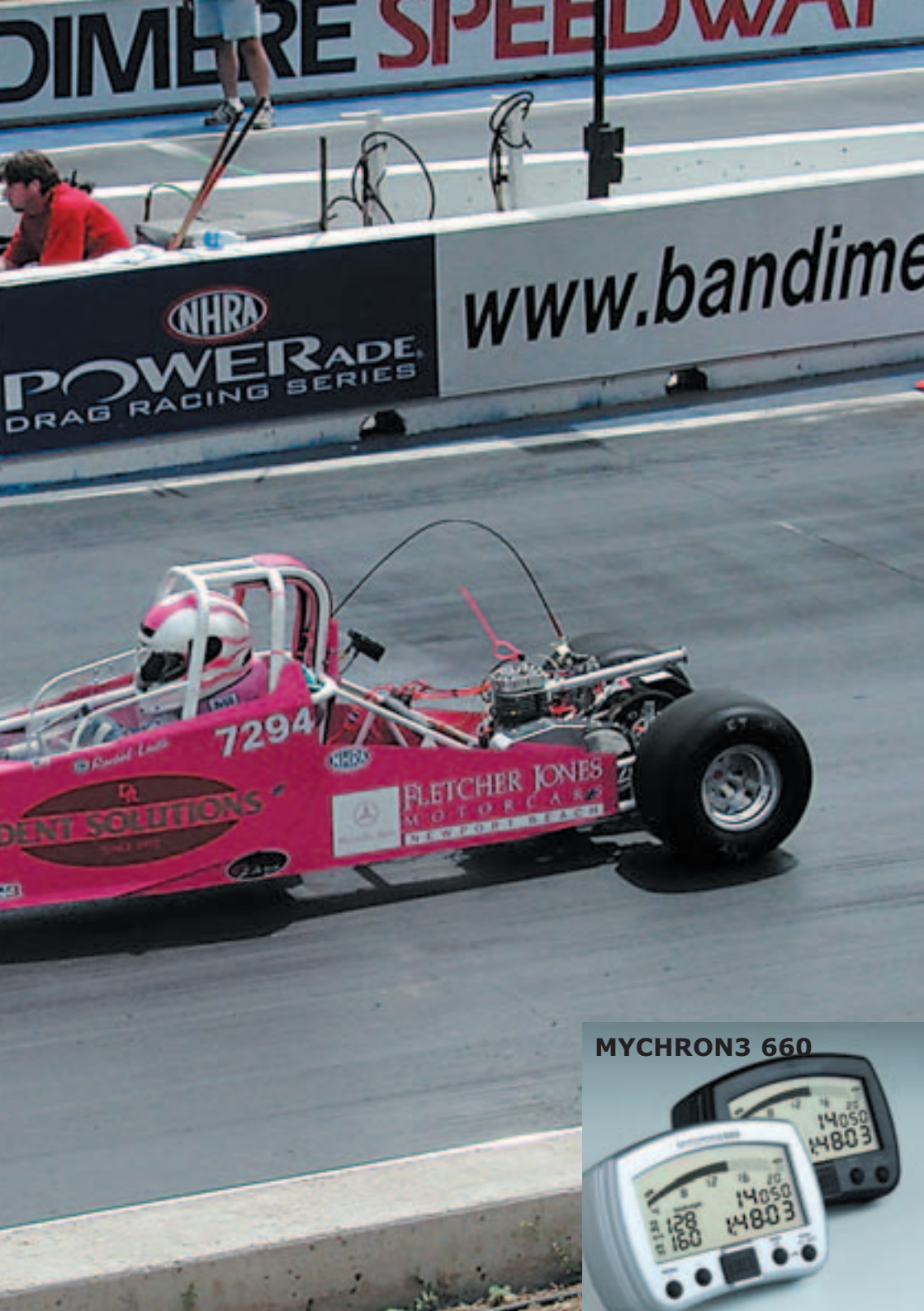

MXL


DAVID



"MyChron3 660: the premier data logger designed specifically for jr. drag racing"

AAR Racing Gear


NHRA
POWERADE
DRAG RACING SERIES
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FLETCHER JONES
MOTORCARS
NEWPORT BEACH
MYCHRON3 660


XG LOG

Travis Harris, Sawyer Yamaha
U.S. Micro Sprint Championship


TAMOIL
OmniDecor
Guido Cappellini

MXL

Guido Cappellini
DAC Racing Factory Team
9 times F1 Inshore World Champion

NetKar
Professional Online Racing Simulator


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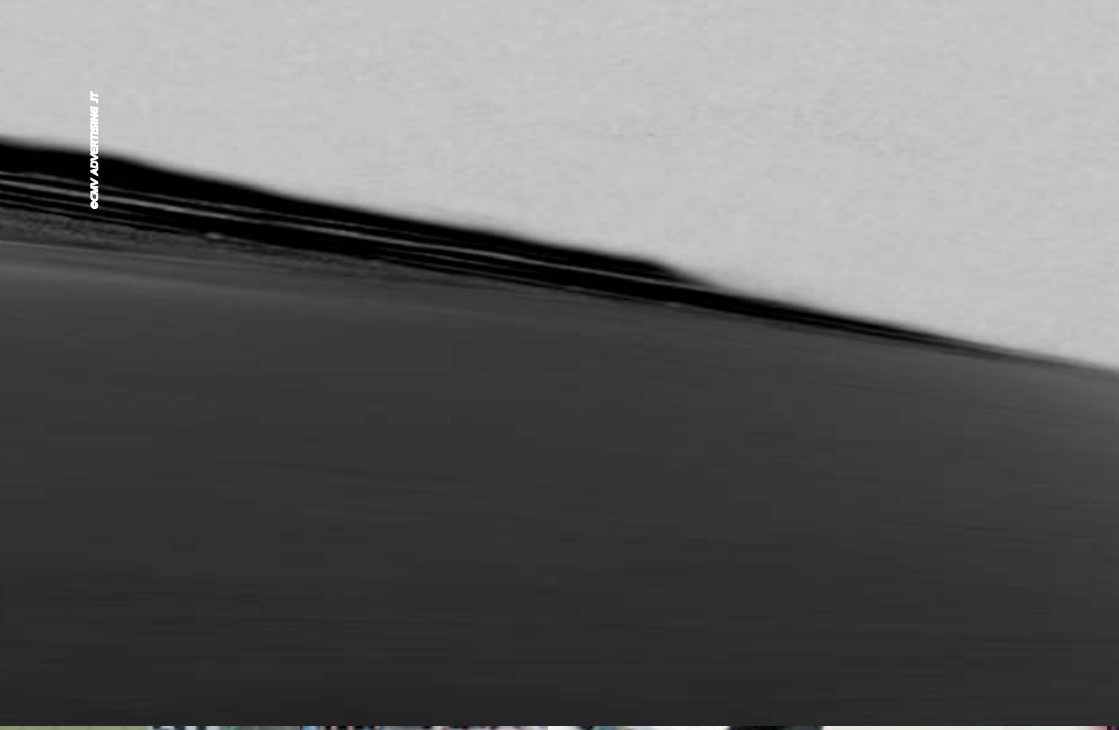

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