



Co-Host:
Peter Krause
www.peterkrause.net
www.gofasternow.com

Webinar Series

Bringing Data Support and Training to You

SmartyCam HD Tips & Tricks
for Proper Video Overlay Configurations

2020 Webinar #55

www.aimsports.com



YouTube

October 6th, 2020

1.800.718.9090

Peter Krause

peter@peterkrause.net

www.peterkrause.net

www.gofasternow.com

SPEED SECRETS
Virtual Track Walk

KRAUSE
& ASSOCIATES
HIGH PERFORMANCE DRIVER DEVELOPMENT

- Krause & Associates LLC at Virginia International Raceway - Ten-Year AiM Dealer
- USE of These Systems Everyday to Coach Drivers and to Teach Drivers to Coach Themselves
- Partners with Ross Bentley in Speed Secrets Virtual Track Walks, On-Line and On-Demand
- Go to <https://speedsecrets.com/virtual-track-walks/>
- 5 Time AiM Sports Webinar Co-Host!



www.aimsports.com



YouTube

Peter Krause

Krause & Associates
High Performance Driver Development





SmartyCam - The First “Intelligent Video” Camera

- What is “Intelligent Video?”
- Why is “Intelligent Video” Important?
- An Accurate Record of *all* that has Happened
- Immediate Review, Quick Assimilation and Actionable Items
- THE Primary Influencer on the Data you are About to Review

80/20 Rule – Ignore the 80% you do Well
Find and Focus on the 20% That Will Make a Difference!

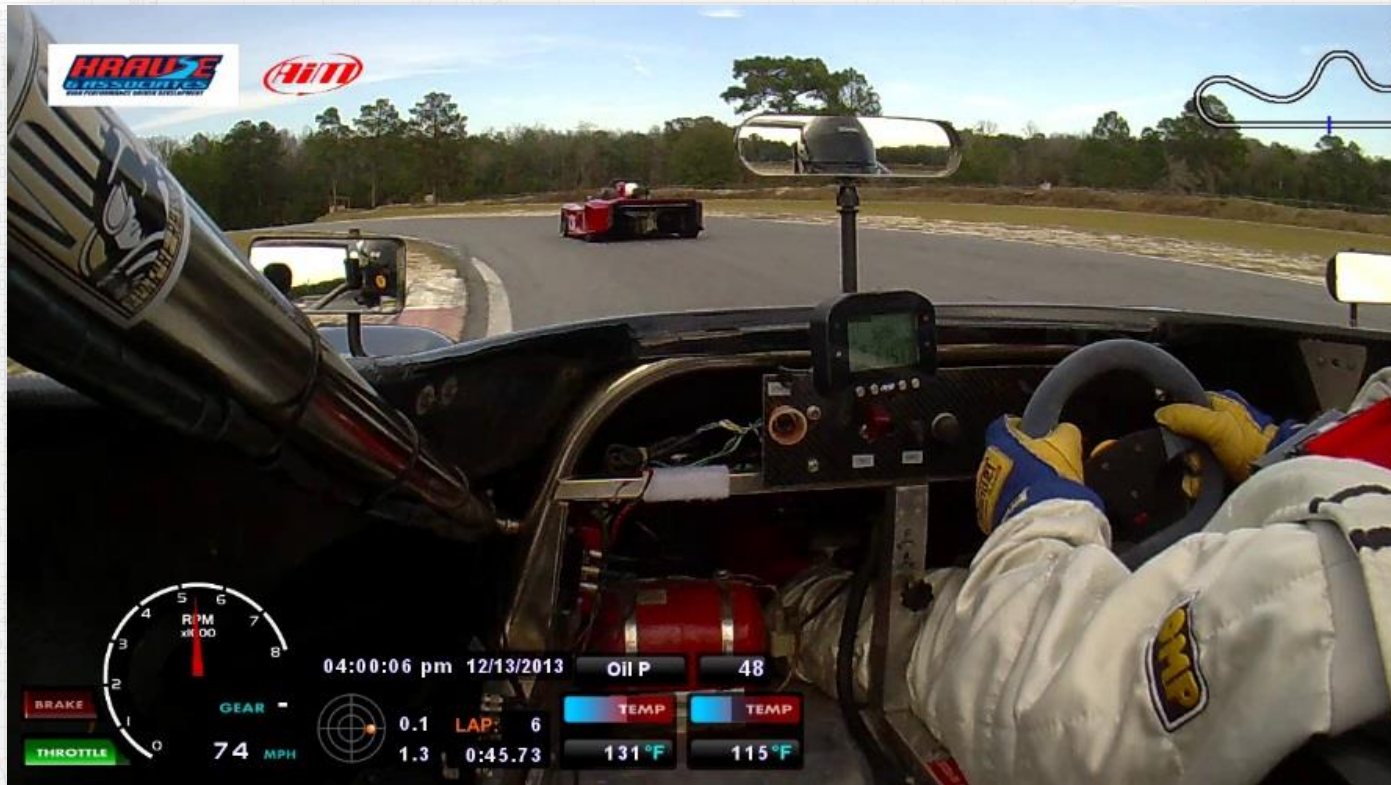
80/20 Methodology Review

- Review quickest lap
- Review car placement
- Review speed of transitions
- Annotate a printed track map with KPI (Key Performance Indicators)
- Quick review of health indicators beginning and end of session



Car Placement and Control Input Review

Are you Hitting EVERY Apex?
What are you Doing, Where?





SmartyCam Hardware Evolution

SmartyCam



SCHD Rev1



SCHD Rev2.1



10 YEARS SINCE THE FIRST ONE
HAPPY BIRTHDAY SMARTYCAM

SmartyCam GP

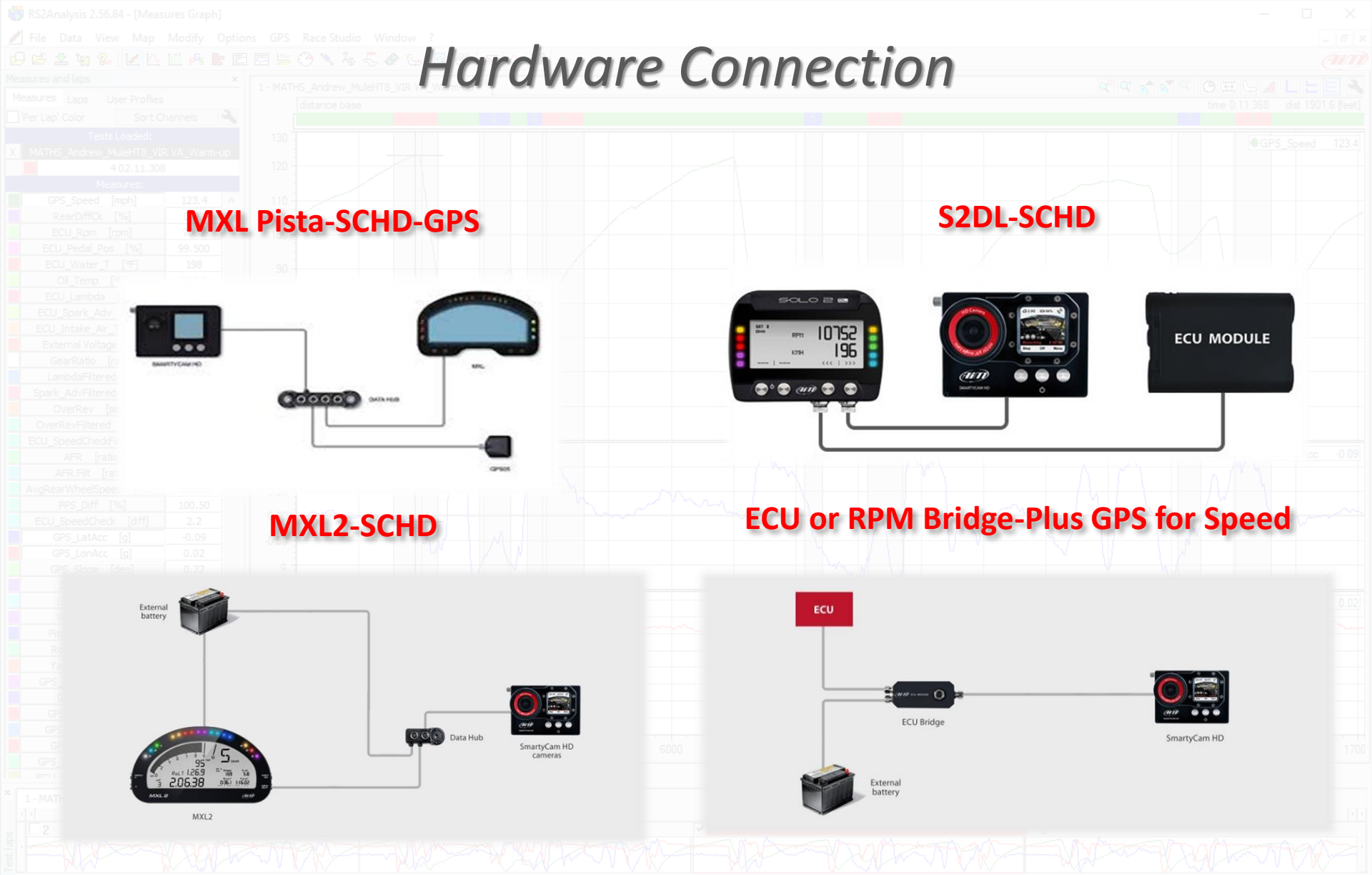


SCHD GP Rev 2 and 2.1



SCHD GP Rev 2.2 w/ Bridge





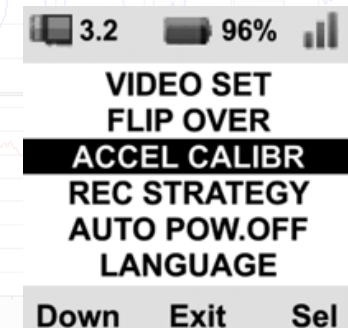
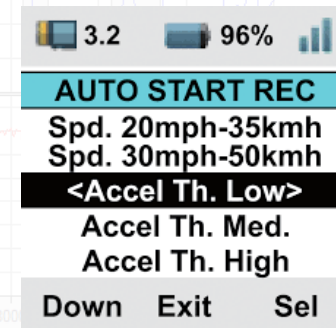
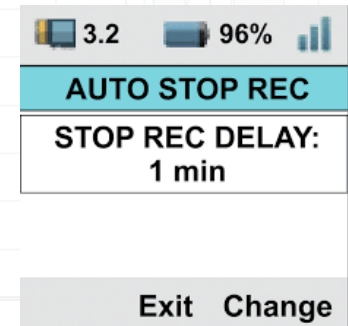
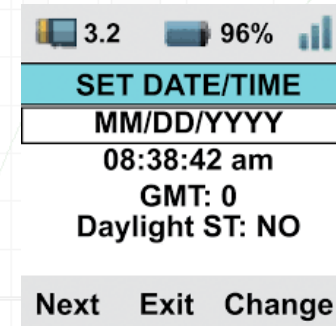
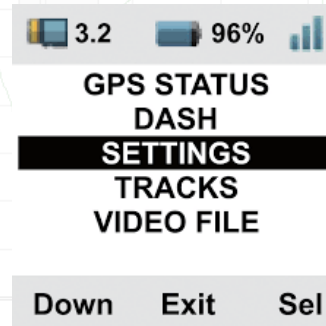
Open Wheel SCHD GP



SCHD Menu Best Practices

MENU>SETTINGS

- Time Zone/DST Settings
- Rec Start/Stop Strategies
- Power Strategies
- Exposure Settings/Audio
- Accelerometers Calibrated



Icon Placement and Camera View



Measures and Laps

Measures Laps User Profiles

Per Lap Color Sort Channels

Tests Loaded:

MATHS_Andrew_MuleHT8_VIR_VA_Warm-up

4 02:11.308

Measures:

GPS_Speed [mph]	123.4
RearDiffCk [%]	0.07
ECU_Rpm [rpm]	7062
ECU_Pedal_Pos [%]	99.500
ECU_Water_T [°F]	198
Oil_Temp [°F]	223.0
ECU_Lambda [A/F]	0.85
ECU_Spark_Adv [deg]	23.50
ECU_Intake_Air_T [°F]	89.6
External Voltage [V]	13.0
GearRatio [ratio]	1.00
LambdaFiltered []	0.851
Spark_AdvFiltered [deg]	23.50
OverRev [secs]	0.00
OverRevFiltered [secs]	0.00
ECU_SpeedCheck [diff]	2.2
AFR [ratio]	12.51
AFR_Flt [ratio]	12.51
AvgRearWheelSpeed [mph]	121.52
RPS_Diff [%]	100.50
ECU_SpeedCheck [diff]	2.2
GPS_LatAcc [g]	-0.09
GPS_LonAcc [g]	0.02
GPS_Slope [deg]	0.22
InlineAcc [g]	-0.02
LateralAcc [g]	-0.17
VerticalAcc [g]	-1.43
PitchRate [deg/s]	-0.6
RollRate [deg/s]	0.8
YawRate [deg/s]	-0.2
GPS_PosAccuracy [°]	0.940
GPS_Healt [°]	15
GPS_Gyro [deg/s]	-0.9
GPS_Heading [deg]	-23.8
GPS_Altitude [m]	142.96
GPS_SpdAccuracy [°]	0.157

Predictive Time in SCHD Overlay



AiM Sports Users Group



Charlie Moschel

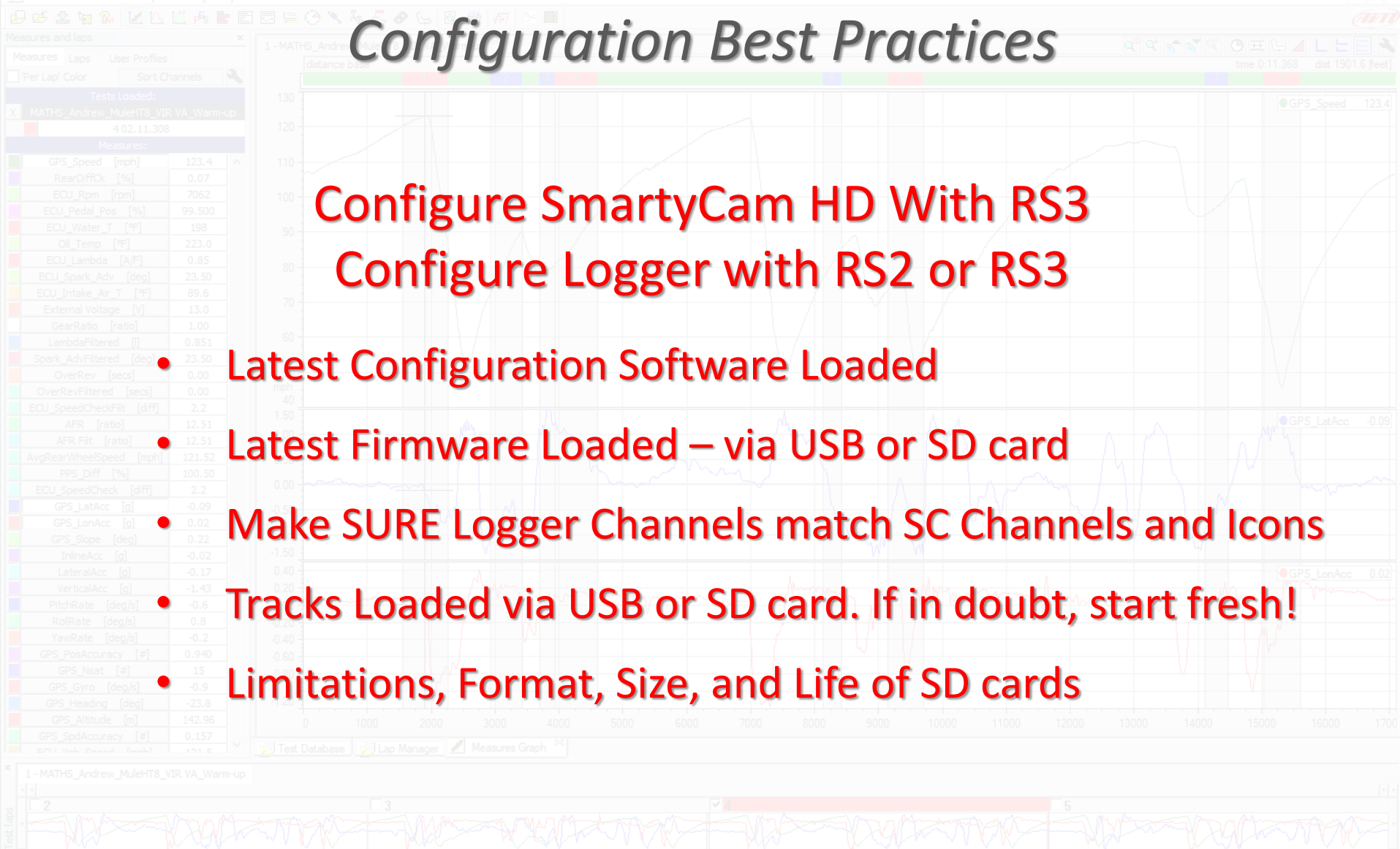
November 19, 2019 · 🌐

I've been asked about how to get predictive time onto SmartyCam video. It's not straight forward, but this is what worked for me last weekend at COTA:

- 1) Open the config for your dash or logger, and make a 'linear correlation' math channel. I used 'Lap Channel --> +/- Test Best Time', multiplier 1.0, offset 0.0, function == 'number', and named it "PMBT"
- 2) In the 'smartcam stream' tab, pick an unused smarty cam function that expects a number; I used "Fuel Level". Make sure to tick the box "Enable all channels for functions". Assign "PMBT" to the Fuel Level function.
- 3) Save and then send the logger config.
- 4) Open smartcam config. Add a 'Long Digit' field to your screen layout, and assign "Fuel Level" to that field. Save and then send the smartcam config.

This worked for me with an EVO5 logger and SCHDGP. You won't see the predicted lap time, but you will see the predicted deviation (faster or slower), which for me is more valuable to see when reviewing video. Note that it's shown in thousandths of a second on video, ie "-512" is predicted 0.512 seconds improvement over test best time. Same number is saved in the data, if you would like to see it in RS2A.

In fact if you only want to see PMBT on video, you may not have to make the math channel: just assign 'Lap Channel --> +/- Test Best Time' directly to 'Fuel Level' function. I've not tested that though.



- Latest Configuration Software Loaded
- Latest Firmware Loaded – via USB or SD card
- Make SURE Logger Channels match SC Channels and Icons
- Tracks Loaded via USB or SD card. If in doubt, start fresh!
- Limitations, Format, Size, and Life of SD cards



Live

Race Studio 3 FW Update, Logger and Camera Configuration

LearnFast™ E-Training Video

Currently 121 Videos and Growing

 **YouTube** www.youtube.com/aimdata




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E-Training Series
Support and Training When and Where YOU Want It

Configuring Wi-Fi Communication
Using Race Studio 3



E-Training Series
Support and Training When and Where YOU Want It

Software Updates
with Race Studio 3

- All New Bi-Weekly 2020 Webinar Videos
- Software Updates with Race Studio 3
- Pre-Calculated Gear Position Function
- Configuring WiFi Communication
- Customizing AiM Device Logos
- Race Studio 3 Basic Configuration - Part 1
- Race Studio 3 Basic Configuration - Part 2
- **I Have Downloaded my Data, Now What - Part 1*
- **I Have Downloaded my Data, Now What - Part 2*
- GPS Lap Insert
- Data Views
- Measure Units
- Sort Channels
- Test Properties
- Per Lap Color
- Export Tests
- Channel Reports
- Setting Time
- Track Mapping
- Selection Criteria
- Sensor Calibration
- Conditional Alarms
- Gear Position
- Firmware Update
- Solo Configuration
- Transmit Tracks
- Gps Manager Overview
- New GPS Track
- Webinars

** Most Popular and Recommended*

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YouTube

Additional Materials

LearnFast™ E-Training Video



RS2Analysis 2.56.84 - [Measures Graph]

File Data View Map Modify Options GPS RaceStudio Window ?

Measures and Laps

Measures Laps User Profiles

Per Lap Color Sort Channels

Tests Loaded:

MATHS_Andrew_MuleHT8_VIR_VA_Warm-up

distance base

time 0:11:36.8 dist 1301.6 feet

Customer Support

AiM Sports technical support staff regularly attend races and other events

Call us at 1-800-718-9090 and Look for us at a track near you!

Measures:

GPS_Speed [km/h]	130
RearDiffLock	
ECU_Rpm [rpm]	7062
ECU_Pedal_Pos [%]	99.500
ECU_Water_T [°F]	
Oil_Temp [°F]	0.85
ECU_Lambda [A/F]	
ECU_Spark_Adv [deg]	
ECU_Intake_Air_T [°F]	
External_Voltage [V]	13.0
GearRatio [ratio]	1.00
LambdaFiltered []	0.851
Spark_AdvFiltered [deg]	23.50

AiM Racing Data Power

RUMBLE

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Customer Support

At an Event Near You!

AiM Sports technical support staff regularly attend races and other events

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Customer Support

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Next Webinar

Thursday Oct 8th, 2020

10:00am Pac / 1:00pm East



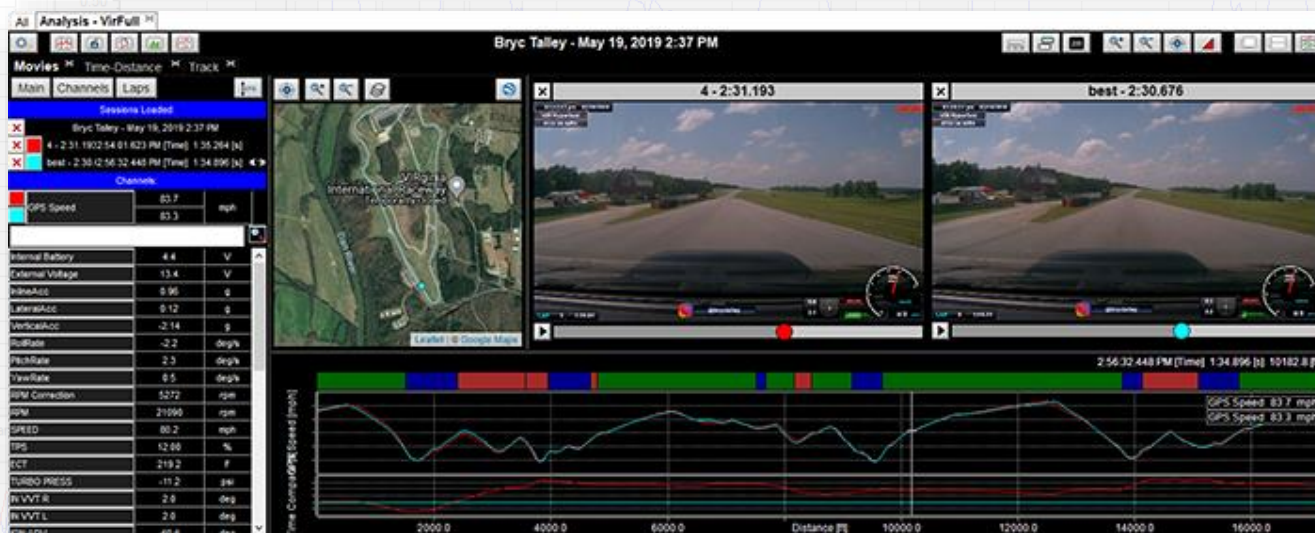
Co-Host
Matt Romanowski

www.TrailBrake.com

@TrailBrakeMatt

Track Event Prep & Planning

With AiM Sports Data and Video



www.aimsports.com



YouTube

Next Webinar Topic

Track Event Prep & Planning





Contact Info

Roger Caddell

roger@aimsports.com
www.aimsports.com

Peter Krause

peter@peterkrause.net
www.peterkrause.net
www.gofasternow.com

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