

☐ Use for predictive time

☒ Use as gear shift lights

Gear	Shift Light 1	2	3	4	5	6	7	8	9	10	
All	5750	6000	6250	6500	6750	7000	7250	7500	7750	8000	⚙️

☐ Activate Simulation



LED 1
LED 2
LED 3
LED 4
LED 5

ralloracing

Co-Host

Chris Rallo

www.ralloracing.com

Webinar Series

Bringing Data Support and Training to You

Digging Deeper Into Alarms

In Race Studio 3 Configuration

2020 Webinar #42

www.aimsports.com



YouTube

1.800.718.9090

August 20th, 2020

Chris Rallo

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Co-Host

Chris Rallo

www.ralloracing.com

- 15 Years of Full Time, Varied and Successful Motorsports Experience
- Equally at Home with a Steering Wheel, Wrench, or Keyboard at his Fingertips
- Chris has Wins, Track Records and a Series Championship as a Driver
- Assists Others as a Coach, Crew, Crew Chief, Strategist, and Data Analyst



August 20th, 2020



Agenda

Digging Deeper Into Alarms

- Review of Functions and Process
- Types of Warnings
- Building Basic Warnings
- Organization, Prioritization and Styles of Setup with Pros and Cons
- Streamlining the Warning Writing Process
- Being Creative
- Supplementing Warnings and Taking Action

Alarms

In Race Studio 3 Configurations

Alarms

The overall topic is 'Alarms', inside of Alarms we can set simple or very complex 'Conditions'.

These defined Conditions then activate the following:

- Messages
- Display Measures
- Popup Color Message Timed
- LED's
- Output Signals

Then you have the option of setting how the Alarm ends. The choices are:

- Condition no longer met
- The device is turned off
- A button is pushed
- Data is downloaded

Modify Alarm

Description:

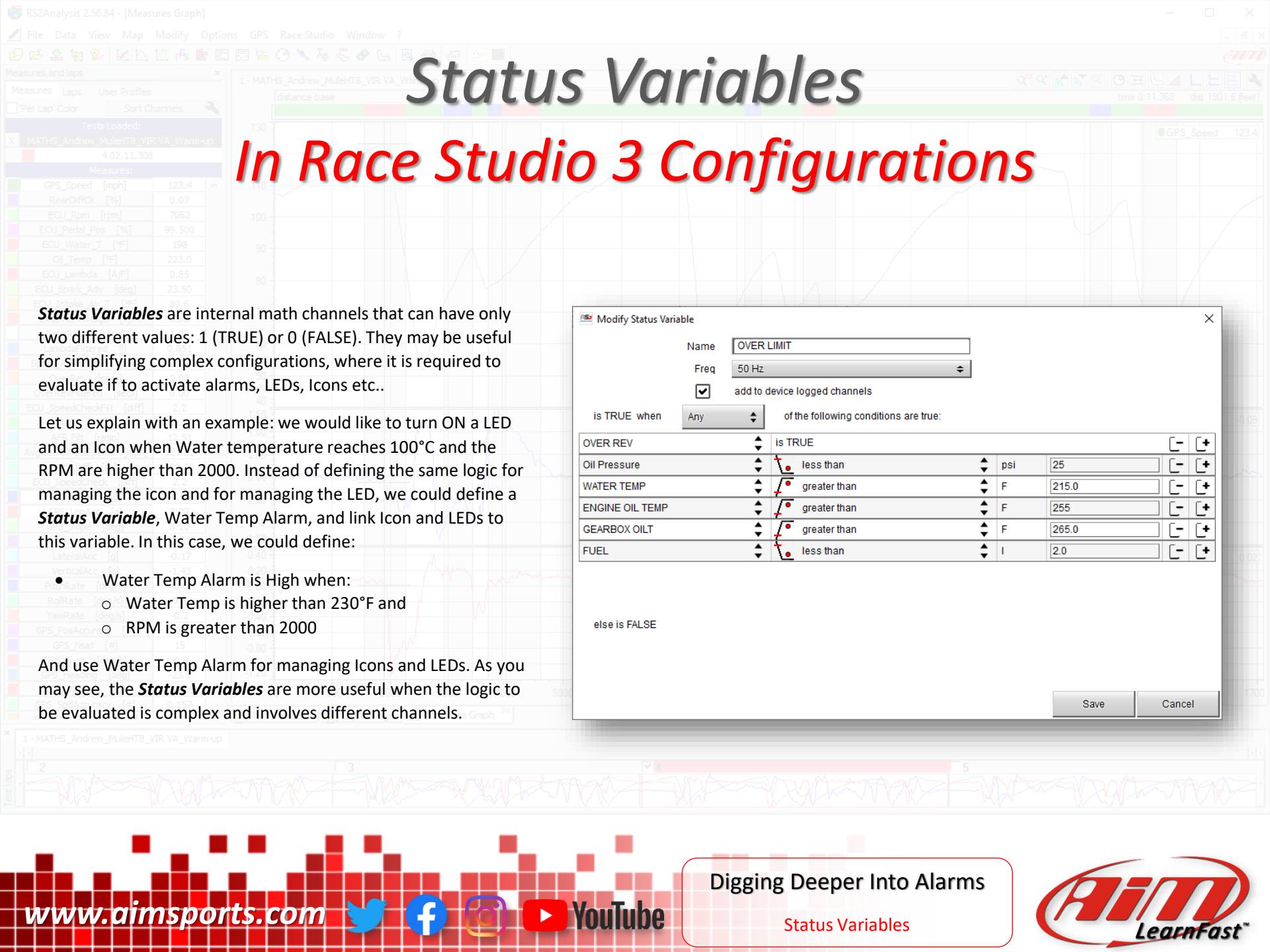
If: of the following conditions are true:

Oil Pressure	less than	psi	25	-	+
RPM	greater than	rpm	3000	-	+

then trigger the following action(s):

Popup Color msg timed	OIL PRESSURE DIP	☐ text	☒ bkg	for 30 seconds	+
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Until:



Status Variables

In Race Studio 3 Configurations

Status Variables are internal math channels that can have only two different values: 1 (TRUE) or 0 (FALSE). They may be useful for simplifying complex configurations, where it is required to evaluate if to activate alarms, LEDs, Icons etc..

Let us explain with an example: we would like to turn ON a LED and an Icon when Water temperature reaches 100°C and the RPM are higher than 2000. Instead of defining the same logic for managing the icon and for managing the LED, we could define a **Status Variable**, Water Temp Alarm, and link Icon and LEDs to this variable. In this case, we could define:

- Water Temp Alarm is High when:
 - Water Temp is higher than 230°F and
 - RPM is greater than 2000

And use Water Temp Alarm for managing Icons and LEDs. As you may see, the **Status Variables** are more useful when the logic to be evaluated is complex and involves different channels.

Modify Status Variable

Name

OVER LIMIT

Freq

50 Hz

☒ add to device logged channels

is TRUE when

Any

of the following conditions are true:

OVER REV	is TRUE				
Oil Pressure	less than	psi	25		
WATER TEMP	greater than	F	215.0		
ENGINE OIL TEMP	greater than	F	255		
GEARBOX OILT	greater than	F	265.0		
FUEL	less than	I	2.0		

else is FALSE

Save

Cancel

Trigger Commands

In Race Studio 3 Configurations

“Trigger Command” executes some specific actions on MX Series.

The commands available up to now are:

- Set next/previous page
- Show camera input page
- Reset alarms
- Activate pushbuttons

Other commands will be available in the next software/firmware releases.

To add a new command.

Press “Add new Command”

A combination of conditions are allowed for setting a **Trigger Command** and it is possible to decide whether the conditions are to be ALL valid or just one of them

Modify Output Command

Description: Reverse

Import Export

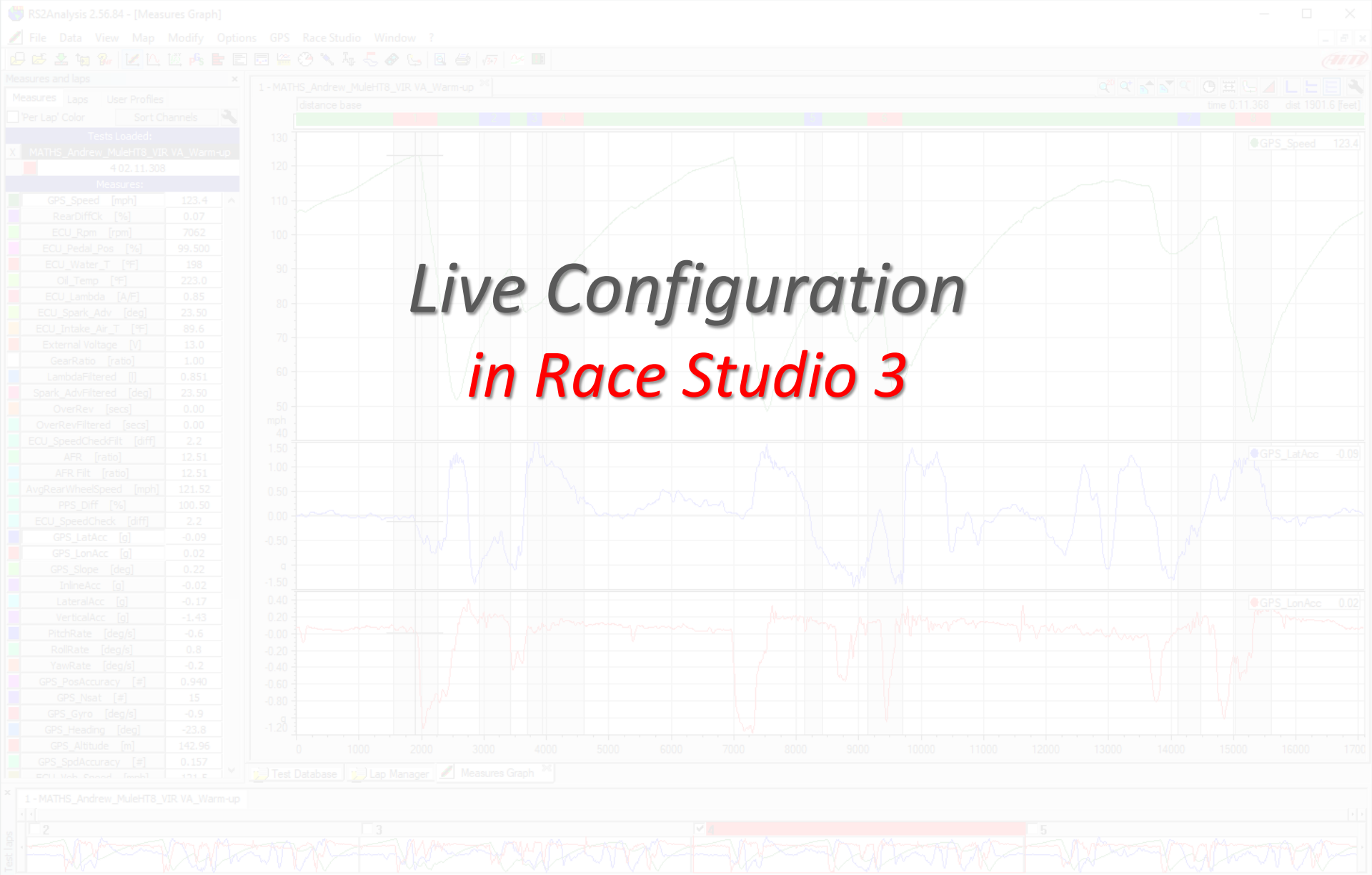
If: All of the following conditions are true:

GEAR equal to R

then trigger the following action(s):

First Camera Input

Save Cancel



Live Configuration in Race Studio 3

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- 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
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Additional Materials
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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

130

4 02:11.3

Measures:

GPS_Speed [km/h]		
RearDiffCk		
ECU_Rpm [rpm]	7062	100
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	60
Spark_AdvFiltered [deg]	23.50	

1 - MATHS_Andrew_MuleHT8_VIR_VA_Warm-up

distance base

time 0:11.368 dist 1301.6 feet

123.4

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!



A black AiM service van parked next to a large black banner featuring the 'RUMBLE' logo and a race car illustration.



A technician wearing an AiM-branded vest works on the engine of a blue race car. The car features an AiM logo and an OMP sponsor sticker.



A man stands in front of an AiM booth at a race event. The booth includes a red canopy with the AiM logo and website, a red feather flag, and a white AiM service van.

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Customer Support

At an Event Near You!



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Next Webinar

Tuesday August 25th, 2020

10:00am Pac / 1:00pm East



Host

Roger Caddell
and ??

Your Vote

You Make The Call!!

Polls

Future Webinar Topics in Progress 0:07

Attendees are now viewing questions 0 of 0 (0%) voted

1. What topics would you like to see in future AIM Sports LearnFast webinars? Select all that apply. (Multiple choice)

Data Analysis	(0/0) 0%
Configurations	(0/0) 0%
Calibrations	(0/0) 0%
Track Maps	(0/0) 0%
Software/Firmware Updating	(0/0) 0%
Hardware Details	(0/0) 0%
SmartyCam Setup	(0/0) 0%
ECU Protocols	(0/0) 0%
CAN Expansion	(0/0) 0%
Sensors	(0/0) 0%

End Polling

Polls

Owned AIM Devices in Progress 0:09

Attendees are now viewing questions 0 of 0 (0%) voted

1. What AIM Sports hardware do you own and use? Select all that apply. (Multiple choice)

MX2P - MX2 1.2 - MXS 1.2	(0/0) 0%
MX2	(0/0) 0%
SOLO2 or SOLO2 DL	(0/0) 0%
MyChron5	(0/0) 0%
EVO Series	(0/0) 0%
MX UTV	(0/0) 0%
SmartyCam	(0/0) 0%
MX2 - MXS	(0/0) 0%
SOLO - SOLO DL	(0/0) 0%
Other	(0/0) 0%

End Polling

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Next Webinar Topic

You Make The Call!



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