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FAQ

Frequently asked questions

Overlays configuration





Overlays configuration

Question:

The overlays of my SmartyCam video do not show the proper value, why?

Answer:

SmartyCam overlay can show the data stream only if correctly configured. To do so:

- run RS2 or RS3 (according to the device you have)
- connect your device to the PC
- enter device configuration section
- associate each channel to its function (in the example a RS3 channel configuration is shown)

| ID | | Name | Function | Sensor | Unit | Freq | Parameters |
|------|---|--------------|-------------------------|-------------------------------|-----------|-------|---------------------------|
| RPM | | RPM | Engine RPM | RPM Sensor | rpm | 20 Hz | max: 16000 ; factor: /1 ; |
| Spd1 | | Speed1 | Vehicle Spd | Speed Sensor | km/h 0.1 | 20 Hz | wheel: 1600 ; pulses: 1 ; |
| Spd2 | ✓ | Speed2 | Vehicle Spd | Speed Sensor | km/h 0.1 | 20 Hz | wheel: 1600 ; pulses: 1 ; |
| Spd3 | | Speed3 | Vehicle Spd | Speed Sensor | km/h 0.1 | 20 Hz | wheel: 1600 ; pulses: 1 ; |
| Spd4 | ✓ | Speed4 | Vehicle Spd | Speed Sensor | km/h 0.1 | 20 Hz | wheel: 1600 ; pulses: 1 ; |
| Ch01 | ✓ | WAT | Water Temp | AiM PT-100 | C 0.1 | 20 Hz | |
| Ch02 | ✓ | СНТ | Head Temp | AiM PT-100 | C 0.1 | 20 Hz | |
| Ch03 | | ThrottlePos | Throttle Pos | Position Pot. Calib | mm | 20 Hz | |
| Ch04 | ✓ | BRKPress | Brake Press | AiM 0-10 bar (X05SNP31010R) | bar 0.1 | 20 Hz | |
| Ch05 | | FuelLvl | Fuel Level | Fuel Level | I 0.1 | 2 Hz | |
| Ch06 | ✓ | Lambda | Lambda of Engine Output | AiM LCU-One Lambda (0.65 - 1. | λ 0.01 | 20 Hz | |
| Ch07 | ✓ | EXT | Exhaust Temp | K type thermocouple | C 0.1 | 20 Hz | |
| Ch08 | ✓ | Battery | Voltage | Generic 0-5 V | mV | 20 Hz | |
| Acc1 | | InlineAcc | Inline Accel | AiM Internal Accelerometer | g 0.01 | 50 Hz | |
| Acc2 | ✓ | LateralAcc | Lateral Accel | AiM Internal Accelerometer | g 0.01 | 50 Hz | |
| Acc3 | ✓ | VerticalAcc | Vertical Accel | AiM Internal Accelerometer | g 0.01 | 50 Hz | |
| Gyr1 | ✓ | RollRate | Roll Rate | AiM Internal Gyro | deg/s 0.1 | 50 Hz | |
| Gyr2 | | PitchRate | Pitch Rate | AiM Internal Gyro | deg/s 0.1 | 50 Hz | |
| Gyr3 | ✓ | YawRate | Yaw Rate | AiM Internal Gyro | deg/s 0.1 | 50 Hz | |
| Accu | | GPS Accuracy | GPS Accuracy | AIM GPS | mm | 10 Hz | |
| Spd | | GPS Speed | Vehicle Spd | AIM GPS | km/h 0.1 | 10 Hz | |
| Alt | | Altitude | Altitude | AiM GPS | m | 10 Hz | |
| OdD | | Odometer | Odometer Total | AiM ODO | km 0.1 | 1 Hz | |



Configuring

- click "SmartyCam Functions setting" in RS2 or "SmartyCam Stream" in RS3 (images below: RS2 left, RS3 right)
- associate each SmartyCam function (left column) to its reference channel (right column) among these previously configured. With RS2, the association has to be performed manually; while with RS3 the software automatically shows the channels that fits the SmartyCam function described in the tab; in both cases, to enable all channels enable "Enable Channels for All Functions" checkbox
- transmit the configuration to the device

| Set Functions to Channels | | | Enable all channels for functions | | | |
|----------------------------------|----------------|----------------|-----------------------------------|--------------------|-------------|----------|
| FUNCTION | CHANNEL | | | | | |
| ENGINE RPM | RPM | | | SmartyCam Function | Channel | |
| REFERENCE SPEED | Speed_1 | | | Engine DBM | DDM | |
| GEAR | none available | | | | | • |
| WATER TEMP | WAT | • | | Speed | Speed1 | ‡ |
| HEAD TEMP | СНТ | • | | Goar | Not Set | |
| EXHAUST TEMP | EXT | • | | Geal | Not Set | • |
| OIL TEMP | NOT SET | • | | Water Temp | WAT | \$ |
| OIL PRESS | NOT SET | • | | Head Temp | СНТ | • |
| BRAKE PRESS | NOT SET | • | | | GIII | • |
| THROTTLE POSITION | ThrottlePos | • | | Exhaust Temp | EXT | ‡ |
| BRAKE POS | NOT SET | • | | Oil Temp | Not Set | • |
| CLUTCH POS | NOT SET | • | | | Horocr | • |
| STEER POS | NOT SET | • | | Oil Press | Not Set | ‡ |
| LAMBDA | Lambda | • | | Brake Press | BRKPress | |
| LATERAL ACCEL | LatAcc | • | | | 2.44.1000 | • |
| LONG ACCEL | NOT SET | • | | Throttle Pos | ThrottlePos | ÷ |
| FUEL LEVEL | FuelLvl | • | | Brake Pos | Not set | |
| BATTERY | Battery | • | | | | • |
| | | | | Clutch Pos | Not Set | • |
| | | | | Steering Pos | Not Set | \$ |
| | | | | Lambda | Lambda | \$ |
| | | | | Fuel Level | FuelLvl | \$ |
| Enable Channel for all Functions | | | | Battery Voltage | Battery | \$ |
| | <u> </u> | <u>C</u> ancel | | | | |



Configuring

It is now necessary to configure each SmartyCam overlay:

- start Race Studio 3
- connect SmartyCam HD/GP HD with the proper mini USB cable
- enter camera configuration page: right on the page are the available overlay sets labelled with their respective function; drag and drop them in the left part of the page and bottom of the preview box each overlay menu appears.

Some overlays category functions can be modified:

- brake bar: brake position brake pressure, inline acceleration; in the example below "brake bar" overlay is included "multi" overlay and set to show brake pressure (Brake Press).
- **generic bar; short/long dgt**: fit all the function; "short/long dgt" overlay show values in digital format
- o temp bar: exhaust, head, oil and water temperature
- o **multi**: include some of the previous overlays
- o **label**: it is possible to manually fill in a text

| brake bar 🏾 🖉 | generic bar [∞] multi [∞] temp t | oar [∞] | | | |
|---------------|--|------------------|---------|-------|---|
| | Function | Unit | Scale | | |
| 216 | Engine RPM | rpm | 10000 🛟 |] | |
| | Speed | km/h 🛟 | 300 🛟 |] | |
| | Brake Pos 🔶 | % | 0 🗘 | 100 🕻 | J |
| | Brake Pos | % | 0 🗘 | 100 🕻 | Z |
| | Brake Press | # | | | |
| | Inline Accel | |] | | |
| | | _ | | | |
| | | | | | |