

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	10.1	2 Hz	
Ch06	✓	Lambda	Lambda of Engine Output	AiM LCU-One Lambda (0.65 - 1.	λ0.01	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	
Асси	◄	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

FUNCTION	CHANNEL			ctions		
ENGINE RPM	RPM		SmartyCam Function	Channel		
REFERENCE SPEED	Speed_1		Faring DDM		•	
GEAR	none available		Engine RPM	RPM	•	
VATER TEMP	WAT	•	Speed	Speed1	\$	
HEAD TEMP	СНТ	•	Gear	Not Set		
XHAUST TEMP	EXT	•	Geal	Not Set	•	
DIL TEMP	NOT SET	•	Water Temp	WAT	\$	
DIL PRESS	NOT SET	•	Head Temp	СНТ		
RAKE PRESS	NOT SET	-			•	
HROTTLE POSITION	ThrottlePos	-	Exhaust Temp	EXT	\$	
RAKE POS	NOT SET	•	Oil Temp	Not Set	^	
CLUTCH POS	NOT SET	-			•	
TEER POS	NOT SET	-	Oil Press	Not Set	\$	
AMBDA	Lambda	•	Brake Press	BRKPress	\$	
ATERAL ACCEL	LatAcc	•			•	
ONG ACCEL	NOT SET	-	Throttle Pos	ThrottlePos	÷	
UEL 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	<mark>√</mark> <u>o</u> k		Battery Voltage	Battery	¢	



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 b	ar [∞]		
1 may	Function	Unit	Scale	
216	Engine RPM	rpm	10000 🗘	
	Speed	km/h 🛟	300 🛟	
	Brake Pos 🕴	%	0 🗘	100 🗘
	Brake Pos	%	0 🗘	100 🗘
	Brake Press	#		
	Inline Accel		1	
		-		