

NEW

toucan

from

JTinnovations

Touchscreen CAL Switch and Gauge Display for Syvecs ECU

DATASHEET

toucan is an innovative touchscreen display unit that connects, via CAN bus or RS232, to the Syvecs engine management system.

It has 2 main functions:

1. Easy naming and selection of Calibrations (or maps), in place of the standard rotary switch.
2. Extensive gauge displays, complete with audible and visible alarms, as well as absolute and dynamic peak markers.

Each CAL position is provided with 3 lines of user-entered text, minimising the risk of selecting the wrong map.

Gauges have an absolute peak marker (with reset button), plus a dynamic peak marker that holds the most recent peak for a configurable period of time before dropping back to the current value.

Four main gauge pages are provided, each with a conveniently grouped set of gauges. A quick touch on any small gauge causes a full-screen gauge to be displayed and the unit can also be set to immediately show the relevant large gauge when an alarm is triggered.

Alarms can be individually enabled for each parameter, with the alarm thresholds set as required. A low oil temperature warning can be enabled, especially important for turbocharged engines to avoid driving hard when the oil's too cold. The audible alarm may be muted if wished.

The display is a full-colour TFT LCD with 320x240 pixels and a resistive touchscreen. Backlight dimming for night time use can be manually selected, and/or automatically enabled if the unit is wired to the vehicles "illumination" circuit.

Green, red and white colour schemes are provided to suit most vehicle dashboards.

Gauges and Alarms

Gauge scales can be display in either imperial or metric units, and road speed in mph or kph. Alarms can be enabled individually as required for each parameter.

Of course, gauges will only show valid data when appropriate sensors are wired to the ECU but gauges 1 through 9 are generally available for most installations. Only full screen gauges for available sensors need be enabled, so "dead" gauges are not displayed.

An additional warning is provided when engine knock is detected by the Syvecs ecu, as well as indication of launch control and antilag status (only in CAN bus mode).

1.	Manifold Absolute Pressure	0-3.5Bar
2.	Boost	Up to 2.5bar
3.	Air Charge Temperature	10-70C/50-150F
4.	Coolant Temperature	60-120C/80-280F
5.	Battery Volts	11-17V
6.	Current Gear	As determined by the ecu
7.	RPM	0-10,000 rpm
8.	Wheel Speed	0-200 mph/0-300kph
9.	Throttle Position	0-100%
10.	Fuel Pressure (with selectable differential mode)	0-7bar/0-105psi
11.	Exhaust Gas Temperature	200-1200C/300-2300F
12.	Lambda	Narrowband mode (Lean/Rich indication) Wideband (0.7-1.3λ)
13.	Oil Pressure	0-10bar/0-150psi
14.	Oil Temperature	50-150C/110-290F

Wiring and Installation

toucan is intended for permanent or semi-permanent installation. It uses the Herbert Richter™ 4-prong mounting system and is supplied as standard with a permanent-fixing swivel mount. Vent clip or windscreen sucker mounts are available as options.

A single latching connector on the rear of the unit attaches to the supplied cable harness, allowing occasional removal of the unit if required. The harness provides connections to vehicle power, the Syvecs ecu itself, and for the CAL switch wiring.

Accessories are available to simplify installation.

toucan has been proudly designed and manufactured in the United Kingdom by JT Innovations Ltd.

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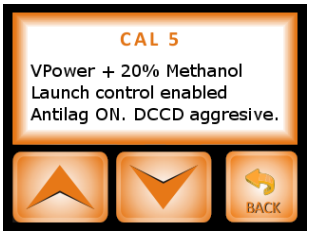
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Technical

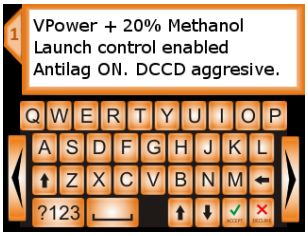
Data Interface	CAN 2.0B at 1Mbit/s with selectable termination, or RS232 at 9600 baud or 38.4kbaud
Expansion Connector	RS232, CAN, Power Out and Ground. Allows connection of *toucan* expansion accessories, available in 2012.
Power	8-20V <200mA typ.
	Connections to permanent, switched and illumination power, via 1A fused connections.
CAL Voltage	Adjustable via menus to match Syvecs configuration. Fail-safe monitoring of CAL voltage.
Memory	Non-volatile storage of all parameters
Firmware Updates	Via rear-panel USB connector, using PC programme.
Compliance	Directives: 2002/96/EC, 72/245/EC, EN50498:2010
Warranty	1 year
Dimensions	100x83x16mm
Weight	200g
Display	3.5” QVGA TFT, 320x240 pixels, 24 bit colour, with touchscreen
Processing system.	190MHz 32 bit ARM9, 8Mbytes Flash memory, 8Mbytes SDRAM.
Package contents	*toucan* unit, power/data cable harness, permanent swivel mount, installation guide.
Accessories	Vent mount, windscreen mount, power wiring adapter allowing easy series-connection to Car Audio ISO connectors, Subaru CAL switch adaptor (allows direct connection to green under-dash “test” connector).



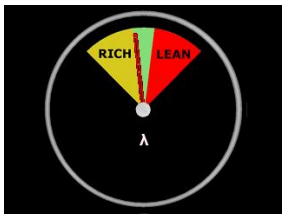








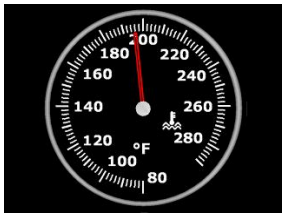
















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