

2013

INSTRUMENTS



Digital Dash Display

The Stack LCD Motorsport Display is the next evolution of driver communication and data acquisition. The carbon composite housing is IP65 sealed against water and dust intrusion and will easily withstand 20g of continuous vibration and 50 g of shock. The 7" LCD panel ensures easy visibility under all circumstances with unmatched brightness and an optically bonded lens for extreme glare suppression. The display layout is configurable to your individual specifications. The system will accommodate four programmable data bus channels (2 CAN and 2 serial) in conjunction with discrete analog sensors and its integrated 3 Axis Accelerometer. Data collection can occur at up to 1 kHz and the internal memory allows for practically infinite recording time. User definable warnings take advantage of super bright, multicolor LEDs placed around the perimeter of the chassis to alert the driver to critical onscreen information.



FEATURES

- Weight: 700g
- Dimensions - 211mm W x 132mm H x 35mm Deep (excl. connector)
- Carbon Composite Housing
- Supply Voltage: 8-18VDC
- Typical Power Consumption: 800 mA
- Single 37 way AS connector. (Mating Connector: Deutsch Autosport AS614-35SN)
- IP65 sealed
- Operating temperature range: -7°C to +80°C
- Humidity: 0-100% RH
- Continuous vibration up to 20g, Shock up to 50g



| Code | Description |
|--------|--|
| ST9918 | Stack LCD Multi-Function Dash-Logger with DataPro Software |

DISPLAY

- 7.0" TFT LCD panel
- Display Brightness: 1000 nit
- Resolution: 800 x 480.
- Onboard photo sensor for automatic brightness control.
- 16 User configurable multi-colour LED's
- Patented Predictive Lap Timing Display for Driver and Vehicle Development
- Display features perfectly rendered virtual analog needles, value display bands, digital value indicators for vehicle parameters and configurable full color text warning messages.
- 20 layers / screens / pages selected from 6 user- configurable templates (screens/instrument cluster designs/layouts), additional configurability supporting team selected graphics, parameter /instrument type and location, and size will be made available with future firmware and PC software releases.

INPUT/OUTPUT

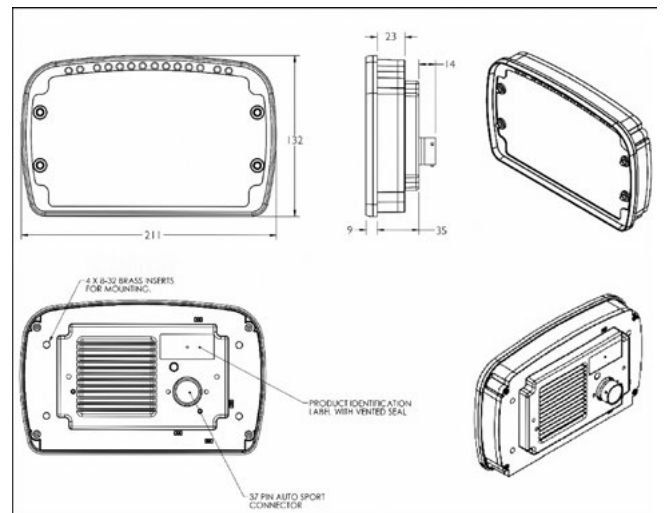
- 12 Configurable user sensor inputs
 - 4 Configurable for Pulse, 0-5v, or resistive (0-526 Ω)
 - 8 Configurable for 0-5V
- Internal 3-axis accelerometer +/-6g
- Internal battery voltage
- 1 Dedicated Laptrigger Switch Input
- 4 Integrated Control Switches
- 4 Configurable I/O –
 - Control Switches
 - Pro Control Outputs – Drive external outputs for warning lights, relay control, etc.
- GPS Input (RS-232) - Mapping, Laptiming, etc.

COMMUNICATION

- 2 Configurable CAN ports - Up to 1 Mb/s (customer electronics package integration)
- 1 Configurable RS232 port: GPS
- 1 Ethernet port: (Configuration, Data Exchange, Firmware Upgrades)
- 1 USB port: (Data exchange, configuration, Copy and upload, firmware upgrades)

DATA LOGGING

- Max number of channels: 128
- Max sample 1,000 Hz
- Max total samples per second: 8,000
- Internal Memory: 4GB solid state internal
- Supplied with DataPro Analysis software
- Data Security: Pin code prevents data review by unauthorized personnel





Analog Dash Display

The ST800 Dash Display System replaces all dashboard instruments - tachometer, oil pressure gauge, fuel pressure gauge, water temperature gauge, oil temperature gauge and voltmeter - with a single lightweight carbon composite display module. Chose the model after reading the list below.

OPTIONAL SEQUENTIAL SHIFT LIGHT MODULE

All Stack Dash Displays can drive the new Sequential Shift Light Module. Using the display menus, each of the 5 shift lights can be independently programmed to a specific RPM value, to provide complete flexibility. The Sequential Shift Light connects to dash harness with just 3 wires, and is ideal for dash-top mounting. (ST539)

LIGHTWEIGHT CARBON COMPOSITE HOUSING

Fully sealed against water and dust to IP67 for maximum reliability.

ULTRA BRIGHT WHITE LED BACKLIGHTING

Ensures clear viewing day and night.

ANALOGUE TACHOMETERS

The preferred choice of most racers.

DIAL FACES

Wide choice of dial faces.

SUPER-BRIGHT WARNING LIGHTS

The dash features a user configurable and built-in super-bright LED shift light. Additionally, an external dash top or panel mount shift light can be simply plugged into the dash harness

TRANSFLECTIVE LCD BACKLIT DISPLAY

Contrast improves when under bright illumination - clearly visible in bright sunlight.

DRIVER SELECTABLE LCD DISPLAY LAYERS

Selectable layers show different engine and performance information. Maximum peak value "Tell-Tale" memory is provided on Speed, Temperature and RPM parameters. Minimum peak value "Tell-Tale" are provided on Pressure and Voltage parameters.

USER CONFIGURABLE INPUTS, DISPLAYS AND ALARMS

INTELLIGENT ALARMS

Provided on all monitored parameters. Alarm levels are user adjustable to suit individual vehicle requirements. An internal alarm light is standard and an optional external light can be simply plugged into the dash harness.



ST539 - 5 Stage Sequential Shift Light Module

| Code | Model | Scale | Unit | Dial face |
|-------------|-------------|--------------------|------|-----------|
| ST8100-A-EC | RACE | 0 - 8.000 rpm | EU | Black |
| ST8100-C-EC | RACE | 0 - 3 - 8.000 rpm | EU | Black |
| ST8100-F-EC | RACE | 0 - 4 - 10.000 rpm | EU | Black |
| ST8100-H-EC | RACE | 0 - 3 - 10.500 rpm | EU | Black |
| ST8100-P-EC | RACE | 0 - 6 - 13.000 rpm | EU | Black |
| ST8130-A-EC | STREET RACE | 0 - 8.000 rpm | EU | Black |
| ST8130-F-EC | STREET RACE | 0 - 4 - 10.000 rpm | EU | Black |

| Model | For Circuit race | For Rally race | For Street race | Total inputs | RPM | Fuel level | Speed (ST670) | Odometer & tripmeter | Oil pressure |
|-------------------|------------------|----------------|-----------------|--------------|-----|------------|---------------|----------------------|--------------|
| ST800 RACE | √ | √ | | 8 | √ | | OPTION | | √ |
| ST800 STREET RACE | | √ | √ | 8 | √ | √ | √ | √ | √ |

| Model | Fuel pressure | Water temperature | Oil temperature | Boost pressure | Battery voltage | Sequential shift light (ST539) | Lap Timing (ST539) |
|-------------------|---------------|-------------------|-----------------|----------------|-----------------|--------------------------------|--------------------|
| ST800 RACE | √ | √ | √ | | √ | OPTION | OPTION |
| ST800 STREET RACE | OPTION | √ | √ | | √ | OPTION | OPTION |

INTEGRATED DISPLAY



| Code | Model | Scale | Dial face |
|-----------|-------------------|--------------------|-----------|
| ST700SR-J | ST700 STREET RACE | 0 - 4 - 10.500 rpm | Black |
| ST700SR-K | ST700 STREET RACE | 0 - 4 - 10.500 rpm | White |
| ST700SR-S | ST700 STREET RACE | 0 - 6 - 15.000 rpm | Black |
| ST700SR-T | ST700 STREET RACE | 0 - 6 - 15.000 rpm | White |
| ST700SR-A | ST700 STREET RACE | 0 - 8.000 rpm | Black |
| ST700SR-B | ST700 STREET RACE | 0 - 8.000 rpm | White |

Sensors

| Code | Sensor type | Description |
|--------|-------------|--|
| ST762K | Standard | Temperature sensor 150° C - M10 thread |
| ST769 | Solid State | Temperature sensor 150° C - M6x1 thread |
| ST740 | Solid State | Boos pressure sensor from 0 to 3,5Bar - 1/8" NPTF thread |



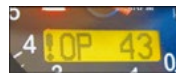
ST700 STREET RACE

The ST700 Dash Display systems integrate tachometer, sequential shift light and voltmeter in a single 80mm instrument. Standard options include speedometer, lap timer and two pressure or temperature. In addition the ST700 can be fitted with a range of performance options, including an acceleration timer, infrared lap timing system, split time memory and straight and corner speed readout.

Standard features include:

- Adjustable day & night backlighting levels to suit ambient light conditions.
- Fully sealed against water and dust to IP67.
- Peak value 'Tell-Tale' memory is provided on all monitored parameters.
- Configurable for all vehicle types and negative earth ignition systems.
- Supplied with mounting bracket, switch kit, separate professional wiring loom and manual.
- 1 year Competition Warranty

ALARM SYSTEM



Alarms on all monitored parameters. The levels are fully configurable.

NEUTRAL ALARM



Simple connection of the instrument to the neutral sensor of any sequential gearbox. Requires neutral indicator (ST918051)

GEAR ALARM



Ultrabright LEDs configurable in 4 different modes: sequential, sequential with flashing, bar and simultaneous. Each LED is controlled individually.

CONFIGURABLE INPUTS



2 inputs for temperature and pressure sensors. Optional standar or solid state sensor are available.

Optionals

LAP TIMING SYSTEM



The lap timing receiver plugs into the standard dash wiring harness. When the vehicle passes the track side beacon the lap time "pops up" on the graphic display with an accuracy of 1/100th of a second. (ST546) optional.

LAP & SPLIT TIME MEMORY



This feature records 75 Lap and Split Times (if Split Timing is activated) and helps drivers evaluate their consistency. (ST7090) optional.

PERFORMANCE UPGRADE



It consists of the Split Time system and the Straight and Corner Speed readout options. Requires sensors:(ST670)+(ST546) (ST093) optional.

ACCELERATION CHRONO

Time of 1/4 mile / 400 meters, and acceleration and deceleration, with selectable speed. Requires sensor (ST670). (ST095) optional.

SPEEDOMETER & ODOMETER

Speedometer and odometer for road use, set in miles or kilometers. Requires sensor (ST670). (ST7094) optional.

SPEED SENSOR

Sensor to be connected for showing the speed on the display. (ST670) optional

| Model | Speed (ST670) | RPM | Battery | 2 x config Channels* | Neutral indicator* (ST918051) | Lap Time (ST456) | Lap Memory (ST6090) | Perf. Upgrade (ST7093) | Accel. Timer (ST7095) | Odometer (ST7094) |
|-------------------|---------------|-----|---------|----------------------|-------------------------------|------------------|---------------------|------------------------|-----------------------|-------------------|
| ST700 | OPTION | √ | √ | √ | OPTION | OPTION | OPTION | OPTION | OPTION | OPTION |
| ST700 STREET RACE | √ | √ | √ | √ | OPTION | OPTION | OPTION | OPTION | √ | √ |

Please note: to use optional sensors is necessary to buy the ST91804 wiring. * Analog inputs require sensor (ST918049) ** Neutral indicator requires analog sensor (ST918049)

ACTION REPLAY TACHOS



ST400

Replay - on the tachometer - up to 25 minutes of RPM data. Review your shift points, choice of gear, gearing and use of the engine's power band. Diameter: 80 or 125 mm

Stack ST400 Key Features

- Ultra high accuracy guaranteed for life
- Proven Stack stepper motor movement - best performer for over 25 years
- Wide range of standard dial faces
- Separate wiring loom
- Exceptional durability
- External Shift Light available

| Code | Scale | Display Ø |
|-------------|--------------------|-----------|
| ST400-08 | 0 - 8.000 rpm | 80 mm |
| ST400-0385 | 0 - 3 - 8.500 rpm | 80 mm |
| ST400-04105 | 0 - 4 - 10.500 rpm | 80 mm |
| ST400-0613 | 0 - 6 - 13.000 rpm | 80 mm |

| Code | Scale | Display Ø |
|-----------|----------------|-----------|
| ST430-08 | 0 - 8.000 rpm | 125 mm |
| ST430-010 | 0 - 10.000 rpm | 125 mm |

NB: ST430 tachos with 125mm Ø display can be mounted on standars 80mm Ø cut outs.



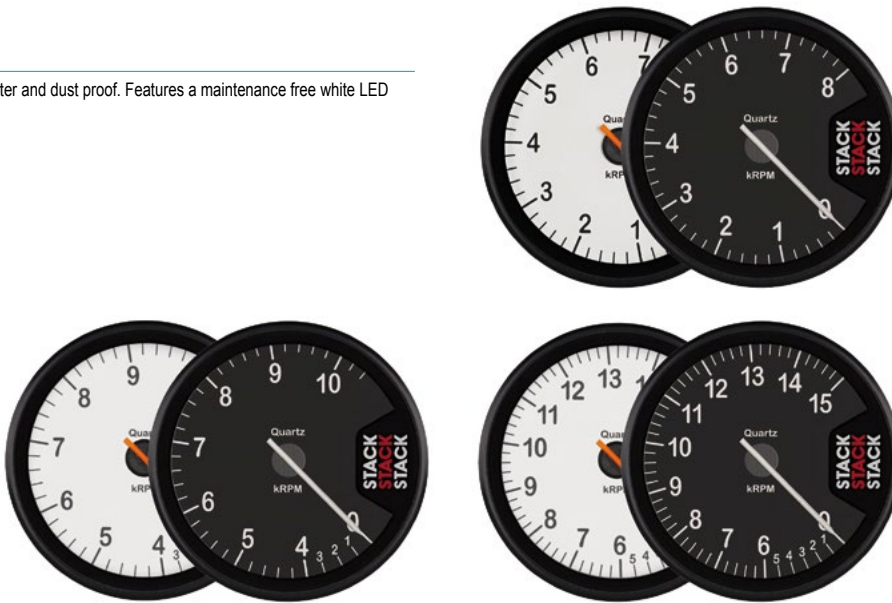


CLUBMAN

Stack tachometer suitable for all engines and ignition types. Fully water and dust proof. Features a maintenance free white LED backlight. Includes a comprehensive installation kit and manual.:

- Configurable for all negative earth and magneto ignition systems.
- Unique Stack Stepper-Motor Needle Movement.
- Unrivalled Digital Quartz accuracy guaranteed for life.
- Peak RPM 'Tell-Tale' memory.
- User adjustable shift light option (lamp not included).
- Exceptional reliability.
- Fully sealed against water and dust to IP67.
- Fits standard 80mm cut outs.
- Supplied with mounting bracket, switch kit, and user manual.
- Maintenance free White LED backlighting on all ST200 models.
- 1 year Competition Warranty.

| Code | Scale | Dial face |
|-------------|--------------------|-----------|
| ST200-08 | 0 - 8.000 rpm | Black |
| ST200-08W | 0 - 8.000 rpm | White |
| ST200-04105 | 0 - 4 - 10.500 rpm | Black |
| ST200-0415W | 0 - 4 - 15.000 rpm | White |
| ST200-0615 | 0 - 6 - 15.000 rpm | Black |
| ST200-0615W | 0 - 6 - 15.000 rpm | White |



CLASSIC ST200 series

Clubman Classics range combine the best in modern electronic technology with "classic" styling. Diameter: 80 mm, no backlighting.



CLASSIC ST230 series

Diameter: 125 mm, no backlighting. NOTE: can be mounted in standard Ø 80 mm hole.

| Code | Scale | Display Ø |
|------------|----------------|-----------|
| ST200C-08 | 0 - 8.000 rpm | 80 mm |
| ST200C-010 | 0 - 10.000 rpm | 80 mm |
| ST200C-012 | 0 - 12.000 rpm | 80 mm |
| ST230C-08 | 0 - 8.000 rpm | 125 mm |



CHRONOTRONIC

Faithfully Stack replicating Chronometric styling and movement, these tachometers are a direct replacement for original Chronometric tachometers, fitting directly into the original cut out.

- Accurate replica of original chronometric tachometer
- Solid-state electronics for exceptional reliability
- Stepper-motor needle movement re-creates 'chronometric' movement
- Chrome style bezel
- Maintenance-free white LED backlighting
- 0-10000 RPM dial face
- Peak RPM Tell Tale Memory
- Configurable for all negative earth ignition systems and magneto ignition systems
- 12 Months Competition Warranty
- Supplied with mounting bracket, switch kit and manual



| Code | Scale | Display Ø |
|----------|----------------|-----------|
| ST901096 | 0 - 10.000 rpm | 80 mm |



SPORT

Low-cost tachometer, compatible with ST38xx speedometers
Air core based in-dash performance tachometer matched to ST38xx speedometers and existing 52mm gauges
Note: this is NOT a stepper motor needle movement.

- Lower cost and reduced feature set from ST200 Clubman models (tach only, not sealed, no shift light or peak memory)
- Supports most 2-8 cylinder applications
- 3 dial face colors (black, white, Stack red)
- Two scales, 0-8k linear and 0-10k linear
- Through dial White LED backlighting
- Will incorporate the black case and 8 terminal connectors
- Intended for performance, tuning, and track day customers seeking to create a fully matched set of instruments within the Stack line



| Code | Scale | Dial face |
|------------|----------------|-----------|
| ST100-08 | 0 - 8.000 rpm | Black |
| ST100-08W | 0 - 8.000 rpm | White |
| ST100-08R | 0 - 8.000 rpm | Red |
| ST100-010 | 0 - 10.000 rpm | Black |
| ST100-010W | 0 - 10.000 rpm | White |
| ST100-010R | 0 - 10.000 rpm | Red |

SPEEDOMETERS



Speedometers

Compatible with most OEM vehicle speed sensors, as well as aftermarket speed pulse generators - plus Stack's ST668 wheel speed sensor. The instrument includes back-lit Odometer and two resettable Tripmeter displays.

- Fully user programmable.
- LCD odometer with a re-settable trip displays.
- Maintenance free through the dial white LED backlighting.
- LED illuminated needle for maximum visibility.
- 80mm visible dial dimension, requires 85mm cutout.
- Available in black or white dial faces.
- Optional sensors available for some cable-drive applications.
- Configurable for all negative earth ignition systems and magneto ignition systems.
- 12 months Competition Warranty. Supplied with manual.

| Code | Scale | Dial face |
|--------|--------------|-----------|
| ST3802 | 0 - 260 Km/h | Black |
| ST3852 | 0 - 260 Km/h | White |
| ST3804 | 0 - 290 Km/h | Black |



WIDE-BAND AIR-FUEL (LAMBDA)



LED 2018

New dual digital and radial LED displays provide accurate real-time readout of either air/fuel ratio or lambda (user-selectable). Diameter: 52 mm

- A 0-5Volt analogue output can be connected to a data-logger or to an ECU to provide real-time closed-loop feedback for improved mapping.
- Supplied complete with wiring harness and includes Bosch LSU 4.9 sensor.
- User-selectable Air/Fuel or Lambda real time display
- Programmable Alarm warns of dangerous lean condition
- Peak Recall of leanest value during last run
- Suitable for all fuel types with AFR from 6:1 to 20:1 (not recommended for leaded fuel)
- Add serial data and Pro-Control outputs, Add programmable display response update

| Code | Dial face |
|--------|-----------|
| ST3403 | Black |
| ST3404 | White |



DIGITAL BOOST PRESSURE



DIGITAL DISPLAY

52mm Boost Controller Gauge 30 PSI / 2 Bar Applications - Digital RPM display

- Digital display with radial LED matched to current Wideband Lambda Arrangement
- Modifies mechanical waste gate duty cycle to achieve higher boost pressures than in place controls would otherwise allow
- Push button programming
- All inclusive kit consists of gauge, wire loom, MAP sensor and 3 port solenoid valve
- Suitable for use with single and twin/bi turbocharged applications
- 4 Programmable control strategies: High Boost, Low Boost, RPM based mapping, Gear based mapping
- MAP, RPM, and VehicleSpeed inputs
- Intelligent gear capture, Peak tell-tale memory
- Pro-Control Output and Input
- 0-5V datalogger output
- Selectable Units PSI, BAR, kPa
- Optional barometric compensation mode to adjust for changing atmospheric conditions.

| Code | Dial face |
|--------|-----------|
| ST3412 | Black |
| ST3462 | White |



MECHANICAL COMBINED

Racetech 52mm mechanical combined gauges:

Oil pressure and water temperature. Scales: 0-100psi and 30-110°C.

Oil pressure, oil temperature. Scale: 0-100psi, 0-140°C.

Generic pressure and temperature. Scales: 0-160psi and 0-120°C.

Black face, white letters, black bezel. 1/8BSP union on the pressure gauge. The capillary tube for the temperature reading is supplied with a 3/8BSP male to male adaptor.



RACETECH

Oil pressure and Water Temperature

| Code | Temp. Wire | Pressure Thread | Backlight |
|-------------|------------|-----------------|-----------|
| PT1011B7 | 7' | 1/8 BSP | No |
| PT1011B9 | 9' | 1/8 BSP | No |
| PT1011BA7 | 7' | -03 | No |
| PT1011BAL12 | 12' | -03 | Yes |
| PT1011BAL7 | 7' | -03 | Yes |
| PT1011BAL9 | 9' | -03 | Yes |
| PT1011BL12 | 12' | 1/8 BSP | Yes |
| PT1011BL7 | 7' | 1/8 BSP | Yes |
| PT1011BL9 | 9' | 1/8 BSP | Yes |



RACETECH

Oil pressure and Oil temperature

| Code | Temp. Wire | Pressure Thread | Backlight |
|-------------|------------|-----------------|-----------|
| PT1014B7 | 7' | 1/8 BSP | No |
| PT1014B9 | 9' | 1/8 BSP | No |
| PT1014BA7 | 7' | -03 | Yes |
| PT1014BA9 | 9' | -03 | No |
| PT1014BAL12 | 12' | -03 | Yes |
| PT1014BAL9 | 9' | -03 | Yes |
| PT1014BL12 | 12' | 1/8 BSP | Yes |
| PT1014BL7 | 7' | 1/8 BSP | Yes |
| PT1014BL9 | 9' | 1/8 BSP | Yes |



RACETECH

Generic pressure and temperature

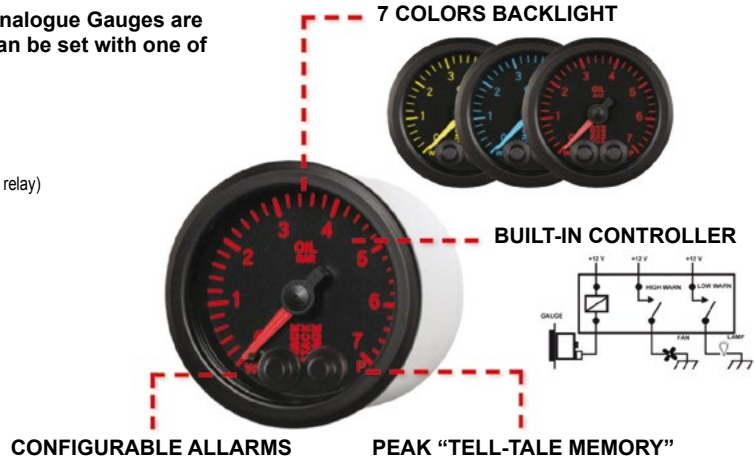
| Code | Temp. Wire | Pressure Thread | Backlight |
|-------------|------------|-----------------|-----------|
| PT1612B7 | 7' | 1/8 BSP | No |
| PT1612B9 | 9' | 1/8 BSP | No |
| PT1612BA7 | 7' | -03 | No |
| PT1612BA9 | 9' | -03 | No |
| PT1612BAL12 | 12' | -03 | Yes |
| PT1612BAL9 | 9' | -03 | Yes |
| PT1612BL12 | 12' | 1/8 BSP | Yes |
| PT1612BL7 | 7' | 1/8 BSP | Yes |
| PT1612BL9 | 9' | 1/8 BSP | Yes |

PROCONTROL

Stack's Pro-Control range of Professional Stepper Motor Analogue Gauges are user configurable with Maximum/Minimum alarms which can be set with one of seven different colours to indicate status.

- 52mm diameter
- Peak "tell-tale" Memory - Max temps, Min pressures
- Configurable max and min full dial alarm warnings
- Configurable Pro-Control output for activating accessories eg. fans, pumps, etc (requires relay)
- 270° full sweep movement for excellent readability
- Temperature gauges with built-in "fan controller"
- Pressure gauges with built-in "pump controller"
- 0-5 Volt analogue output for data logger or ECU (except EGT and Fuel Level gauges)
- Configurable backlight colour
- Black dialface when powered off
- 7 Colour LED through-the-dial backlighting
- Better than 2% accuracy.

All ProControl gauges (except Fuel Level and Voltmeter) come complete with wiring harness and associated solid-state sensor.



Oil pressure

| Code | Scale |
|--------|-------------|
| ST3501 | 0 - 7 bar |
| ST3502 | 0 - 100 psi |



Fuel pressure

| Code | Scale |
|--------|-------------|
| ST3503 | 0 - 1 bar |
| ST3504 | 0 - 15 psi |
| ST3505 | 0 - 7 bar |
| ST3506 | 0 - 100 psi |



Water temperature

| Code | Scale |
|--------|-------------|
| ST3507 | 40 - 120°C |
| ST3508 | 100 - 260°F |



Oil temperature

| Code | Scale |
|--------|-------------|
| ST3509 | 40 - 140°C |
| ST3510 | 100 - 280°F |



Boost pressure

| Code | Scale |
|--------|-----------------------|
| ST3511 | from -1.0 to +2.0 Bar |
| ST3512 | from -30 to +30 psi |



Exhaust temp.

| Code | Scale |
|--------|------------|
| ST3513 | 0 - 1100°C |
| ST3514 | 0 - 2000°F |



Fuel level

| Code | Scale |
|--------------------------------------|--------------|
| ST3515 | programmable |
| Wiring harness & sensor not included | |



Voltmeter

| Code | Scale |
|--------------------------------------|---------|
| ST3516 | 8 - 18V |
| Wiring harness & sensor not included | |

PROFESSIONAL STEP-MOTOR

They combine digital microprocessor accuracy with a high-precision stepper motor needle movement.

- 52mm diameter
- Fast, smooth stepper motor needle drive
- 270° full sweep movement for excellent readability
- Remotely mounted solid-state sensors keep hazardous fluids in the engine compartment
- Better than 2% accuracy
- All-electronic design for maximum reliability
- White LED through-the-dial backlighting
- Black dialface with White LED illuminated needle or White dialface with Orange LED illuminated needle



Oil pressure



Fuel pressure



Water temperature



Oil temperature



Boost pressure

| Code | Scale | Dial Face |
|--------|-------------|-----------|
| ST3301 | 0 - 7 bar | Black |
| ST3351 | 0 - 7 bar | White |
| ST3302 | 0 - 100 psi | Black |
| ST3352 | 0 - 100 psi | White |

| Code | Scale | Dial Face |
|--------|-------------|-----------|
| ST3303 | 0 - 1 bar | Black |
| ST3353 | 0 - 1 bar | White |
| ST3304 | 0 - 15 psi | Black |
| ST3305 | 0 - 7 bar | Black |
| ST3355 | 0 - 7 bar | White |
| ST3306 | 0 - 100 psi | Black |
| ST3356 | 0 - 100 psi | White |

| Code | Scale | Dial Face |
|--------|-------------|-----------|
| ST3307 | 40 - 120°C | Black |
| ST3357 | 40 - 120°C | White |
| ST3308 | 100 - 260°F | Black |

| Code | Scale | Dial Face |
|--------|-------------|-----------|
| ST3309 | 40 - 140°C | Black |
| ST3359 | 40 - 140°C | White |
| ST3310 | 100 - 280°F | Black |

| Code | Scale | Dial Face |
|--------|-----------------------|-----------|
| ST3311 | from -1.0 to +2.0 bar | Black |
| ST3361 | from -1.0 to +2.0 bar | White |
| ST3312 | from -30 to +30 psi | Black |



Clock

| Code | Scale | Dial Face |
|--------|-------|-----------|
| ST3317 | 12 | Black |
| ST3367 | 12 | White |



Exhaust temp.

| Code | Scale | Dial Face |
|--------|------------|-----------|
| ST3313 | 0 - 1100°C | Black |
| ST3363 | 0 - 1100°C | White |
| ST3314 | 0 - 2000°F | Black |



Fuel level

| Code | Dial Face |
|--------|--------------|
| ST3315 | Black |
| ST3365 | White |
| | Programmable |



Volmeter

| Code | Scale | Dial Face |
|--------|---------|-----------|
| ST3316 | 8 - 18V | Black |
| ST3366 | 8 - 18V | White |

ELECTRICAL

Easy to install, white lit dial and illuminated needle, supplied with sensor (wires not included).

- 90° sweep • simple 3-wire installation • 52mm diameter.



Oil pressure

| Code | Scale | Dial face |
|--------|-------------|-----------|
| ST3201 | 0 - 7 bar | Black |
| ST3251 | 0 - 7 bar | White |
| ST3202 | 0 - 100 psi | Black |
| ST3252 | 0 - 100 psi | White |



Water temperature

| Code | Scale | Dial face |
|--------|-------------|-----------|
| ST3207 | 40 - 120°C | Black |
| ST3257 | 40 - 120°C | White |
| ST3208 | 120 - 250°F | Black |



Oil temperature

| Code | Scale | Dial face |
|--------|-------------|-----------|
| ST3209 | 60 - 150°C | Black |
| ST3259 | 60 - 150°C | White |
| ST3210 | 140 - 300°F | Black |



Volmeter

| Code | Scale | Dial face |
|--------|---------|-----------|
| ST3216 | 8 - 18V | Black |
| ST3266 | 8 - 18V | White |

PROFESSIONAL STEP-MOTOR CLASSIC

They combine Professional stepper-motor features with a CLASSIC design.

- Fast, smooth stepper motor needle drive
- 270° full sweep movement for excellent readability
- White LED through-the-dial backlighting
- 52mm diameter



Oil pressure

| Code | Scale | Dial Face |
|---------|-------------------|-----------|
| ST3301C | from 0 to 7 bar | Black |
| ST3302C | from 0 to 100 psi | Black |



Fuel pressure

| Code | Scale | Dial Face |
|---------|-------------------|-----------|
| ST3303C | from 0 to 1 bar | Black |
| ST3304C | from 0 to 15 psi | Black |
| ST3305C | from 0 to 7 bar | Black |
| ST3306C | from 0 to 100 psi | Black |



Water temperature

| Code | Scale | Dial Face |
|---------|-------------|-----------|
| ST3307C | 40 - 120°C | Black |
| ST3308C | 100 - 260°F | Black |



Oil temperature

| Code | Scale | Dial Face |
|---------|-------------|-----------|
| ST3309C | 40 - 140°C | Black |
| ST3310C | 100 - 280°F | Black |



Boost pressure

| Code | Scale | Dial Face |
|---------|-----------------------|-----------|
| ST3311C | from -1.0 to +2.0 bar | Black |
| ST3312C | from -30 to +30 psi | Black |



Clock

| Code | Scale | Dial Face |
|---------|-------|-----------|
| ST3317C | 12 | Black |



Fuel level

| Code | Dial Face |
|---------|--------------|
| ST3315C | Black |
| | Programmable |



Voltmeter

| Code | Scale | Dial Face |
|---------|---------|-----------|
| ST3316C | 8 - 18V | Black |

MECHANICAL

This range of Stack gauges have been specifically designed for vehicles with no or low powered supply systems.

- 52mm diameter
- Black dialface with White LED illuminated needle or White dialface with Orange LED illuminated needle
- Bronze bourdon tube 270° sweep movement
- Mechanical gauges do not require 12V power to operate. They make direct physical contact with the item they are reading. They do this through tubing or lines, which eliminates the need for electric signals.
- Ideal for vehicles that operate on voltages other than 12V, with no voltage at all (magneto applications) or operate on a battery with no generator.
- Note: 12 volt supply is needed if backlighting required.



Oil pressure

| Code | Scale | Dial Face |
|--------|-------------|-----------|
| ST3101 | 0 - 7 bar | Black |
| ST3102 | 0 - 100 psi | Black |



Water temperature

| Code | Scale | Dial Face |
|--------|-------------|-----------|
| ST3107 | 50 - 115°C | Black |
| ST3108 | 120 - 240°F | Black |



Boost pressure

| Code | Scale | Dial Face |
|--------|-----------------------|-----------|
| ST3111 | from -1.0 to +2.0 bar | Black |
| ST3161 | from -1.0 to +2.0 bar | White |
| ST3112 | from -30 to +30 psi | Black |
| ST3162 | from -30 to +30 psi | White |

GAUGE MOUNTS



| Code | Description |
|----------|---|
| ST262121 | Stack Pedestal Auxiliary Gauge Mount - carbon |



| Code | Description |
|----------|-----------------------------|
| ST264803 | Stack Roll Cage Gauge Mount |



| Code | Description |
|----------|---|
| ST264809 | Stack Pedestal Auxiliary Gauge Mount - standard |

WIRING HARNESSES FOR Ø 52 MM GAUGES

| Code | Description |
|----------|--|
| ST265226 | Replacement Wiring Harness for Fluid Temp. Gauges STACK ST3300 |
| ST265227 | Replacement Wiring Harness for Fluid Pressure gauges STACK ST3300 |
| ST265229 | Replacement Wiring Harness for Boost gauges STACK ST3300 |
| ST265232 | Replacement Wiring Harness for Wideband Lambda gauge STACK ST3400 |
| ST265233 | Replacement Wiring Harness for Fuel Level gauge STACK ST3300 |
| ST265234 | Replacement Wiring Harness for Voltmeter gauge STACK ST3300 |
| ST265251 | Replacement EGT Probe & Wiring Harness for EGT gauges STACK ST3300 |
| ST265294 | Replacement Wiring Harness for Fluid Pressure gauges STACK ST3500 |
| ST265295 | Replacement Wiring Harness for Fluid Temp. Gauges STACK ST3500 |
| ST265296 | Replacement Wiring Harness for Boost gauges STACK ST3500 |
| ST265297 | Replacement Wiring Harness for Fuel Level gauge STACK ST3500 |
| ST265298 | Replacement Wiring Harness for Voltmeter gauge STACK ST3500 |
| ST265299 | Replacement EGT Probe & Wiring Harness for EGT gauges STACK ST3500 |



Wiring harnesses for 52 mm



SENSORS FOR Ø 52 MM GAUGES



| Gauge code | Description | Sensor code |
|------------|--------------------------------------|-------------|
| ST3201 | GAUGE, OIL PRESS, ELECTRIC | ST262242 |
| ST3202 | GAUGE, OIL PRESS, ELECTRIC | ST262242 |
| ST3207 | GAUGE, WATER TEMP, ELECTRIC | ST262256 |
| ST3208 | GAUGE, WATER TEMP, ELECTRIC | ST262258 |
| ST3209 | GAUGE, OIL TEMP, ELECTRIC | ST262256 |
| ST3210 | GAUGE, OIL TEMP, ELECTRIC | ST262258 |
| ST3251 | GAUGE, OIL PRESS, ELECTRIC | ST262242 |
| ST3252 | GAUGE, OIL PRESS, ELECTRIC | ST262242 |
| ST3257 | GAUGE, WATER TEMP, ELECTRIC | ST262256 |
| ST3258 | GAUGE, WATER TEMP, ELECTRIC | ST262258 |
| ST3259 | GAUGE, OIL TEMP, ELECTRIC | ST262256 |
| ST3260 | GAUGE, OIL TEMP, ELECTRIC | ST262258 |
| ST3301 | GAUGE, OIL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3301C | GAUGE, OIL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3302 | GAUGE, OIL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3302C | GAUGE, OIL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3303 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262245 |
| ST3303C | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262245 |
| ST3304 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262245 |
| ST3304C | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262245 |
| ST3305 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3305C | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3306 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3306C | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3307 | GAUGE, WATER TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3307C | GAUGE, WATER TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3308 | GAUGE, WATER TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3308C | GAUGE, WATER TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3309 | GAUGE, OIL TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3309C | GAUGE, OIL TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3310 | GAUGE, OIL TEMP, PRO STEPPER MOTOR | ST262252 |

| Gauge code | Description | Sensor code |
|------------|--|-------------|
| ST3310C | GAUGE, OIL TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3311 | GAUGE, BOOST, PRO STEPPER MOTOR | ST262249 |
| ST3311C | GAUGE, BOOST, PRO STEPPER MOTOR | ST262249 |
| ST3312 | GAUGE, BOOST, PRO STEPPER MOTOR | ST262249 |
| ST3312C | GAUGE, BOOST, PRO STEPPER MOTOR | ST262249 |
| ST3351 | GAUGE, OIL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3352 | GAUGE, OIL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3353 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262245 |
| ST3354 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262245 |
| ST3355 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3356 | GAUGE, FUEL PRESS, PRO STEPPER MOTOR | ST262246 |
| ST3357 | GAUGE, WATER TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3358 | GAUGE, WATER TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3359 | GAUGE, OIL TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3360 | GAUGE, OIL TEMP, PRO STEPPER MOTOR | ST262252 |
| ST3361 | GAUGE, BOOST PRESS, PRO STEPPER MOTOR | ST262249 |
| ST3362 | GAUGE, BOOST PRESS, PRO STEPPER MOTOR | ST262249 |
| ST3403 | GAUGE, WIDEBAND AIR-FUEL RATIO (LAMBDA), PRO-CONTROL | ST265316 |
| ST3404 | GAUGE, WIDEBAND AIR-FUEL RATIO (LAMBDA), PRO-CONTROL | ST265316 |
| ST3501 | GAUGE, OIL PRESS, PRO-CONTROL | ST262246 |
| ST3502 | GAUGE, OIL PRESS, PRO-CONTROL | ST262246 |
| ST3503 | GAUGE, FUEL PRESS, PRO-CONTROL | ST262245 |
| ST3504 | GAUGE, FUEL PRESS, PRO-CONTROL | ST262245 |
| ST3505 | GAUGE, FUEL PRESS, PRO-CONTROL | ST262246 |
| ST3506 | GAUGE, FUEL PRESS, PRO-CONTROL | ST262246 |
| ST3507 | GAUGE, WATER TEMP, PRO-CONTROL | ST262252 |
| ST3508 | GAUGE, WATER TEMP, PRO-CONTROL | ST262252 |
| ST3509 | GAUGE, OIL TEMP, PRO-CONTROL | ST262252 |
| ST3510 | GAUGE, OIL TEMP, PRO-CONTROL | ST262252 |
| ST3511 | GAUGE, BOOST PRESS, PRO-CONTROL | ST262249 |
| ST3512 | GAUGE, BOOST PRESS, PRO-CONTROL | ST262249 |

SENSORS FOR MULTIFUNCTION DISPLAYS



Sensors for multifunction displays

| Code | Description |
|-------|---|
| ST492 | Pulse Amplifier (e.g. Gearbox Sensor Amplifier) |



Sensors for multifunction displays

| Code | Description |
|-------|--|
| ST668 | Proximity Sensor for ST3800 Speedometers |



Sensors for multifunction displays

| Code | Description |
|-------|------------------------|
| ST670 | Proximity Speed Sensor |



Sensors for multifunction displays

| Code | Description |
|--------|---|
| ST745K | 0-150 psi Fluid Pressure Sensor (1/8 NPTF)+lead |



Sensors for multifunction displays

| Code | Description |
|-------|---|
| ST740 | 0 to 3.5 bar/ 50 psi boost sensor (1/8"NPTF) (replacement only) |



Sensors for multifunction displays

| Code | Description |
|--------|---|
| ST760K | 150 °C Fluid Temp. Sensor (1/8 BSPT) + lead |



Sensors for multifunction displays

| Code | Description |
|--------|--|
| ST762K | 150 °C Fluid Temp. Sensor (M10) + lead |



Sensors for multifunction displays

| Code | Description |
|--------|---|
| ST764K | 150 °C Fluid Temp. Sensor (1/8 NPTF) + lead |



Sensors for multifunction displays

| Code | Description |
|-------|--|
| ST769 | -20 to 150 deg C temperature sensor (M6x1) |



Sensors for multifunction displays

| Code | Description |
|--------|---|
| ST742K | 0-30 psi Fluid Pressure Sensor (1/8 NPTF)+ lead |

WIRING HARNESSES FOR MULTIFUNCTION GAUGES

| Code | Description |
|-----------|--|
| ST584 | Installation Kit for ST400 Tachometer |
| ST594 | Loom for ST400/430/C |
| ST872-006 | Loom for 2005-2006 Spec. ST8100/8130/8110/8120 |
| ST872-806 | Loom for 2005-2006 Spec. ST8110SR |
| ST884 | Extender harness Kit (2x0.7m;2x1.4m;1x2.1m) |
| ST913029 | Installation Kit for Clubman Tachometer |
| ST918020 | 0.7 m Extension Harness |
| ST918021 | 1.4 m Extension Harness |
| ST918022 | 2.1 m - Extension Harness |
| ST918039 | Main loom for ST500 & ST700 |
| ST918040 | ST670 RPM adapter (ST670 not included) |
| ST918049 | Sensor loom for ST700 |



Wiring harnesses for multifunction



LAP TIMING SYSTEMS



Lap Timing system

Lap Timing System

The lap timing receiver simply plugs into the standard dash wiring harness.

When the vehicle passes the track side beacon the lap time "pops up" in the graphic display with an accuracy of 1/100th of a second.

At any time the driver can select the Lap Time Display layer to show the Last Lap Time, Best Lap Time and number of laps driven.

| Code | Description |
|-------|--|
| ST546 | Infrared Lap Timing System receiver & beacon |



Lap Timing receiver

| Code | Description |
|-------|--|
| ST543 | Infrared Lap Timing System receiver only |



Lap Timing trackside beacon

| Code | Description |
|-------|--|
| ST544 | Infrared Lap Timing System trackside beacon only |



SHIFT LIGHTS & GEAR INDICATORS

| Code | Description |
|-------|---------------------------------------|
| ST532 | Dash Top Shift Light - amber |
| ST533 | Dash Top Shift Light - white |
| ST534 | Dash Top Shift Light - red |
| ST536 | Panel Mount Shift Light - white |
| ST537 | Panel Mount Shift Light - red |
| ST538 | Panel Mount Shift Light - amber |
| ST539 | 5 Stage Sequential Shift Light Module |



ST532



ST533



ST534



ST539



ST536



ST537



ST538



Shift Lights & Gear Indicators

The new and improved Cartek Shift Light incorporates 8 full colour, high intensity LED's and now includes an additional alarm signal input which will flash a different display pattern to let the driver know there is a fault with the vehicle.

You can configure:

- The lower and upper RPM settings with or without the engine running
- Select from several LED display patterns for the Shift Light sequence
- The brightness of the LED's.

The Cartek Shift Light is designed to work with most ignition systems and tach signals.

The unit is fully sealed for open-cockpit cars and motorcycles.

Size:W75mm x H18mm

| Code | Description |
|----------|--------------------------------------|
| CK-LS-CL | Sequential Shift Light Module CARTEK |



ACCESSORIES

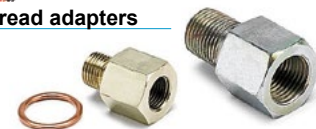


Switch kits

| Code | Description |
|-------|-----------------------------------|
| ST510 | 2 Switch kit |
| ST511 | 3 Switch kit |
| ST514 | 4 Switch kit (without connectors) |



Thread adapters



| Code | Description |
|----------|------------------------------|
| ST154003 | 1/8 NPTF to M10 adapter |
| ST154006 | 1/8 NPTF to 1/8 BSPT adapter |
| ST154012 | M6x1 to M10x1 adapter |
| ST154013 | M6x1 to 1/8 NPTF adapter |
| ST154016 | 1/8 BSP to 1/8 NPTF adapter |