



THE LOGIC™ 10

www.bodylogicuk.com | 01706 854857

Simtek (UK)'s BodyLogic™ range is designed, specifically, to give greater functionality and reliability to a vehicle's electrical systems whilst at the same time reducing its physical size and complexity.

The Logic™ range allows the use of more modern switching, if preferred, and greatly simplifies the wiring, switching and control systems in the vehicle.

The complete range is built around the need to comply with vehicle type approvals (IVA ETC) and all have the option of approved immobiliser and alarms*

The BodyLogic™ range features a large number of smart but uncomplicated functions such as indicator lights "current draw learn" which allows the customer to have any combination of light types whilst retaining the light failure warning, smart daytime running light control as well as functions like customer configurable wiper intermittent control and on board approved immobiliser*. One new exciting feature is our wireless switch control allowing the use of steering-wheel-mounted switches or simply allowing the reduction of the number of hard wires needed in the system.

The BodyLogic™ range can be incorporated into any harness design you or we can dream up. The range comes pre-configured to be used in a wiring system as a prescribed (Base model) or as a + model you were you can control the auxiliary channels as you choose. The + model also has the option of active software that allows you to use momentary switching and single buttons to activate multiple functions e.g. Single button Ignition/crank control.

The range also allows for complete customisation. The units can be configured, during manufacture, to suit your exact requirements.

The BodyLogic™ range has another trick up its sleeve, by using our wireless switch module (BodyLogic™ Smart RF), the control units can be directly connected to a switch bank or

steering wheel without the need for wires. Designed for vehicles with a number of switches mounted on the steering wheel this system can be expanded in a number of smart ways.

BODYLOGIC™ 10, 10+, 10I AND 10I+

This is the second smallest unit in our combined unit range and is in a ABS housing 100X150mmX35mm in dimension (Machined aluminium version available)

There are 4 off the shelf options to choose from and all units have all the functions required to control a road-registered, well-specified vehicle with or without a wind screen, they have all the necessary functions for IVA approval as well as the option to upgrade to on-board immobiliser *

The unit incorporates all the control electronics, power switching and fuse protection in one unit and features self-resetting fusing as used by many OEM systems.

The Logic 10's physical layout is arranged so that the vehicle's wiring harness can be simplified and designed in sections, allowing a "Dashboard harness" to be created for all the switching, gauges and other associated warning lights whilst a "Chassis harness" could be created to cover all the powered components such as lights wipers, Fuel pump ETC. Battery power is supplied to the unit via an M6 power stud on the side, which can be upgraded to an Amphenol RadSok™, to simplify and speed up installation in a motorsport or busy production environment.

THE BODYLOGIC™ RANGE FEATURES MANY SMART FUNCTIONS SUCH AS:

- Battery master switch input to cut ignition dead on de-activation of master switch (for competition applications) and fully compatible with all makes of master switch.
- Single button keyless ignition and crank.
- Crank inhibit for vehicles with automatic gearboxes, Vehicles destined for export and vehicles where the risk of cranking the engine in gear is high to name but a few applications.
- Power saving on load circuits during cranking and with ignition off.
- Push to pass lights flash (endurance racing).
- Single or multiple headlight unit configuration (Zenon and LED compatible).
- Indicator lights with "Bulb out" current draw learn.
- Indicator control has automatic switch type adaption (momentary or latching switch).
- Built in dead stop to allow the use of any wiper motor / Wiper switch combination.
- Intermittent wiper control with customer setup to allow the adjustment of the intermittent function to suit switch type and time delay to customer preference.
- Head light wash wipe.
- Smart DRL control, Turns DRL off on the side the indicators are currently active.
- Programmable output unit, for functions such as heated screen timing, variable cooling fan / water pump control or after-run cooling system control.
- Direct Interface with wireless

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STD 11 - Wiper outputs - Fused outputs for Speed1 and Speed2
STD 12 - Battery fused Out (Max 6 fused outputs)

THERE ARE SIX OTHER AVAILABLE CHANNELS TO USE AS REQUIRED. WE HAVE SUGGESTED THEY ARE USED AS FOLLOWS:

Spare 1 - Engine control,
-ECU +
-Injector / valve +
-Coil+
-Ancillary +

Spare 2 - Fuel pump,
-Fuel pump
-Lambda heater / lift pump

Spare 3 - Cooling fan,
-Cooling fan 1 (12.5Amps)
-Cooling fan 2 (12.5Amps)
-Combine the outputs to give 25Amps for one big fan.

Spare 4 - Compressor horn or use as required up to 25Amps.

Spare 5 - Multi-use channel and has 2 fused outputs up to 25Amps total.

Spare 6 - Use for Power wash or if wash wipe is required otherwise use as required

OTHER AVAILABLE FUNCTIONS ARE:

- Auxiliary Side repeater indicators output.
- Indicator warning for tow socket function.
- Spare 5 Primary use Heated front screen and can have smart timed control. Alternatively, this channel can be link to a separate or existing

temp sensor to control cooling fans were no direct switch is available or to control after run fan and pump or to control timed/heat sense heated screen. Its control can be from a direct input or via a dedicated programmable control function (programmable at Simtek) to control the output in a number of ways against the trigger or other inputs variables.

-RF Control (Blip fob with control of lights for parking, and control for door locking etc.

-Wireless switch unit (BodyLogic™ Smart RF).

-Passive or active Immobiliser.

-CAN control - This can be used to either take in control inputs or to allow the unit to be used as a relay / Fuse node.

*(Under consideration for Thatcham approval)