



ProLatch R

Latching relay control

STERLING POWER



A versatile, 0 volt drop latching relay


The **ProLatch R** is not a conventional relay. A conventional 80A/ 12V relay would consume 450mA 'staying on'. This is fine when using a 70A alternator. However, when using a 60W solar cell on a typical cloudy day the output is around 400mA, the conventional relay therefore renders the solar cell useless.

The **ProLatch R** is designed to 'lock into position' and will not consume power by 'staying on.' The only current drawn is to run the internal software which amounts to about 0.5mA (900x more efficient). This makes the **ProLatch R** ideal for use with solar cells or wind power, where every little counts.

IP68 fully -
waterproof



designed and made in England



Remote control functions (optional)

- 1) Input voltage
- 2) Output voltage
- 3) Optional water proof display, encapsulated electronics
- 4) Various override to allow lights to be switched on for safety (only available with remote)
- 5) Sleep: power saver function
- 6) Audible alarm stop
- 7) Audible alarm disconnect
- 8) Back light option on/ off
- 9) Background light colour change depending on function
- 10) Relay circuit opened or closed indicator
- 11) High voltage trip alarm and low voltage warning

The **ProLatch R** can be set to trigger 'on' and 'off' at certain voltages according to the user's need. 'On' voltages can be set from 10.7V - 14.8V and the 'off' voltages from 10.4V - 14.5V. There are also factory preset voltage trigger points which are suitable for 95% of applications.

Principle Features:

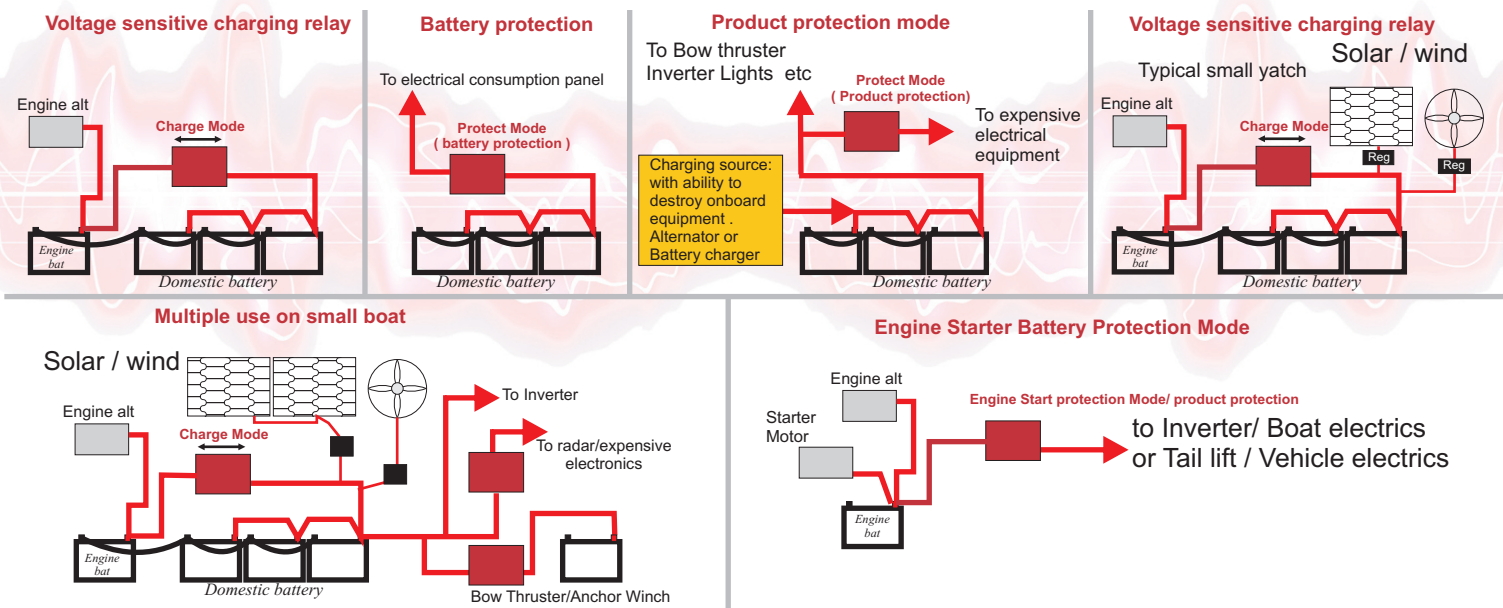
IP68 - fully waterproof

✓ **Charging mode - Uni / bidirectional.** When the **ProLatch R** is installed between 2 batteries (e.g. engine starter and auxiliary) it works as a **bidirectional** voltage sensitive relay (i.e. The trigger voltage on the input or output will activate the relay). The **ProLatch R** will latch when the alternator is active allowing current to flow from the starter to the auxiliary via the **ProLatch R**. In contrast, if there is a solar cell / wind gen / other charging source on the auxiliary battery bank it will also activate the relay and allow charge to flow to the starter battery. The **unidirectional** setting triggers the activation of the relay by the voltage on the input stud *only*.

✓ **Battery protection mode** - The **ProLatch R** prevents the over charging or over discharging of batteries. In order to prevent over charging, the relay disengages at a preset voltage or a voltage you specify (e.g. 14.4V). Therefore the battery will disconnect from the charging source. Conversely, to prevent battery depletion beyond a certain voltage, the relay will prevent charge from being drawn by the draining source (appliance). The device alerts the user by switching the power 'off' for 10 seconds and then back 'on' for 1 minute. This function saves the battery and does away with those large replacement bills faced by hiring agencies.

✓ **Engine start protection mode** - The **ProLatch R** can also be used on vehicles where all appliances are run from one starter battery (due to warranty or footprint reasons) such as: lorries, mobility vehicles and vans with inverters etc.. The **ProLatch R** allows your appliances to run safely from an engine starter battery without its voltage dropping below the engine starting voltage. If the voltage drops below the starting voltage the appliance will be cut off. It 'saves the day' by always allowing you to start the engine.

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Part Number	Continuous Current	Max Intermittent Current	Quiescent Current mA	Input voltage	Output stud	Preset voltage (can be adjusted if required)		
LR80	80	500	0.5	12/24 auto	6 mm	Battery protect Off 11v on 13v	Starter Protect Off 12.4 on 13v	Charging mode on 13.3 off 12.9
LR160	160	1000	0.5	12/24 auto	8 mm	Off 11v on 13v	Off 12.4 on 13v	on 13.3 off 12.9
LR240	240	1500	0.5	12/24 auto	8 mm	Off 11v on 13v	Off 12.4 on 13v	on 13.3 off 12.9
LRB80	80	500	0.5	B = Budget, Relay only available with a fixed / non-programmable factory setting				
LRR	Latching relay remote with 5 metres of cable , for longer use standard telephone cable extension							

Start Pro Tech

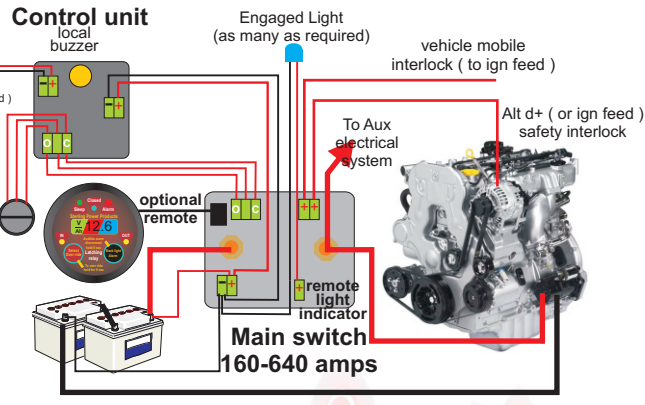
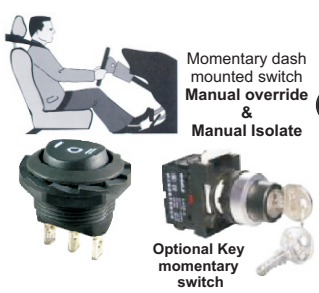
Is a dedicated, flexible vehicle battery protection product, with an extremely wide range of uses. The control box is standard and options include: more buzzers / lights and even a digital remote control panel.

The control box comes preset with default setting which would cover the vast majority of uses, however, it can be altered with the built in magnet.

Features:

- 1) Alternator / ignition feed interlock to prevent switch operation while engine is running.
- 2) Ignition switch interlock, to ensure product continues to remain engaged even if an alternator fails or a belt breaks (to get you home).
- 3) Dash mounted override switch to engage product to start engine (you can have as many as you want).
- 4) Dash mounted manual battery isolator.

IP68 waterproof



- 5) There is a buzzer built into the control box to give a warning before the unit disengages, this can be duplicated as many times as you wish.
- 6) engaged indicator 2 mA draw (fit or not up to you).
- 7) remote digital meter plus override functions for the more discerning installer, whether operator has more information and so more ability to make decisions.

Description	Part Number
12V and 24V auto select auto activation box inc remote buzzer plus 10 meter cable This part number does not include the isolation switch or the remote control, you must chose one from the below list	SPT1
Optional (recommended if full features are required) Remote control plus 10 m cable Key Switch Option (for added vehicle security)	SPRC ELKS1
Remote Buzzer Option	BZ
Additional Momentary switch option (one included in SPT1 as standard)	ELS1

Select what size Sterling Electrical Latching Battery Isolator you require for the above product					
Continuous rating (A)	5 sec (A)	30 sec (A)	vehicle (V)	Part number	Suitable for
480	4500	1800	12	SP12480	vans and cars
480	4500	1800	24	SP24480	vans and cars
640	6000	2400	12	SP12640	larger vehicles
640	6000	2400	24	SP24640	larger vehicles