

INDUSTRIAL PRODUCT RANGE

Logistics | Transport | Civil | Commercial

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SmarTrack® Fleet Management

Fleet management systems are playing an increasingly vital role in optimising materials handling operations and increasing bottom line profits for companies worldwide. RCT is meeting this demand with its fleet management solution, SmarTrack® Global.

The innovative solution provides relevant, customised information in real-time to employees at every level of the supply chain. The system can be installed on a diverse range of industrial equipment, regardless of make or model.

SmarTrack® Global can be used anywhere in the world with its multilingual user interface. It delivers machine data from multiple sites; all under one platform, any time, any where. SmarTrack® Global streamlines operations and simplifies the industrial fleet management process.

It empowers management with information about machine and operator activity, resulting in smarter, profit-boosting decisions.

Features:

- **✓ Connectivity** | 4G or Wi-Fi
- ✓ Email Alerts | Checklist, Impact, Over Speed, Over Weight, Seat, Buckle and more
- Message of the Day | Configure a message to show on the operator display such as "Watch for pedestrians", a different message available for each day
- ✓ **Multi-Lingual** | Operator display and website options
- **✓ GPS Location** | And GPS Tagging of certain events
- GPS Zoning | Use a dedicated output to control a speed-limiter when moving between zones
- GPS Zoning | Use a dedicated output to control a speed-limiter when moving between zones
- Machine Utilisation | Able to be shown by multiple inputs from travel, hydraulic pump
- Battery Voltage Monitoring
- Critical Output | Critical Output relay available to interface with machine and accessories activated by critical events such as checklist, impact, and excess idle

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Speed Gates

Easy Speed Control.

The Muirhead® Speed Gates are a system designed to improve safety for company equipment and personnel across materials handling operations.

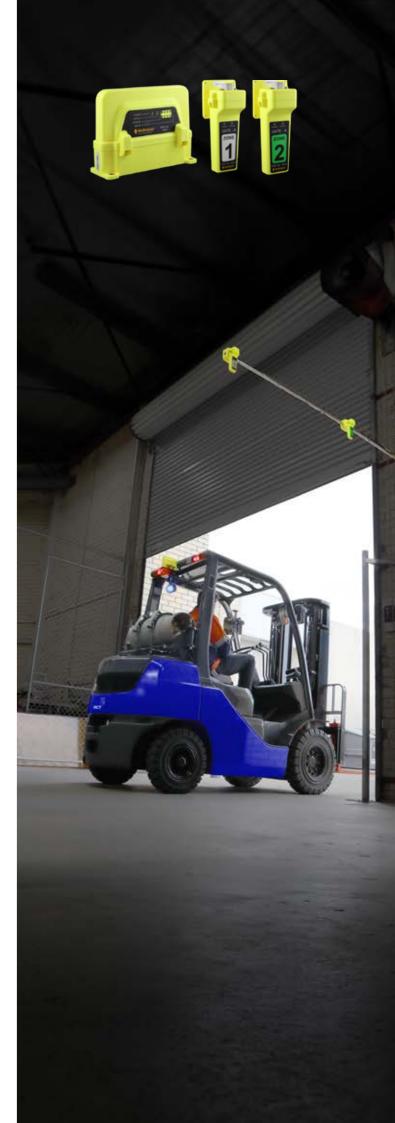
The technology can be applied to warehouses to safely control forklift speed when entering and exiting through doorways.

Speed Gates consist of a gate mounted at each doorway. A Machine Location Tag is installed to the mobile equipment which detects when the piece of equipment has travelled through a gate and signals a Muirhead® Speed Limiter to select the predetermined maximum speed allowed in that specific area.

The Speed Gates can be configured to control up to four separate speeds across a single site. To enable the control of the machine speed a Machine Location Tag must be interfaced with a Muirhead® Speed Limiter and may also be interfaced into any 12/24 VDC input in third party devices that may already have the ability to control the speed of the equipment.

Features:

- Speed can be controlled throughout a building with Speed Gates at each doorway.
- The system components can operate in a variety of environmental conditions.
- Easy installation and no ongoing maintenance required.



Speed Limiters

For greater control in reducing incidents

With speed being one of the major contributors to forklift accidents, the Muirhead® Forklift Speed Limiter provides a safe reliable solution for controlling speed in most forklift applications.

The system can be fitted to both cable and/or electronic throttle systems and is designed to interface into machine wiring either as a plug and play or following simple instructions.

The Forklift Speed Limiter has a built-in safety circuit that prevents overspeed in the event of faulty speed signal or system disconnection.

RCT design forklift speed limiters to suit a wide variety of machine types and models.

The Muirhead® Forklift Speed Limiter can also interface into any of the RCT speed zone systems to enhance the speed control on your site.

Features:

- Increases workplace and forklift safety.
- Reduces speed related injuries
- Reduces fuel, running and maintenance costs
- Extends vehicle service life
- ✓ Assists in maintaining OHS procedures
- Secure speed programming

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Machine Speed Zoning

Keeps you & machine safe with control

The Muirhead® GPS Zone Controller is the latest in machine zone and location solution and is ideally suited for large outdoor sites where zones can be set to slow machines down in hazardous areas, or around buildings to slow the machine down before it enters a building.

With up to 50 zones and 4 different outputs, the GPS Zone Controller will automatically change machine speed as it passes between zones.

The zones are configured by the Site Administrator on the SmarTrack® website.

The systems uses GPS Technology and is suitable for sites that require slow speed inside buildings and higher speeds outside in open areas.

Features

- ✓ Suits larger 'open' sites
- ✓ Up to 4 outputs and 50 zones per site
- Low on-going cost
- ✓ Flexible easy to change zone areas
- ✓ IP65 rated
- ✓ Input voltage for device 8-32 VDC
- Machine defaults to low speed if GPS signal is lost
- ✓ Zone adjustment through user friendly interface

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Engine Protection System

Monitoring critical engine functions

The Muirhead* Engine Protection system offers engine protection for machines by monitoring critical engine functions such as oil pressure, coolant level and coolant temperature.

The system pre-warns the operator of critical operating conditions prior to the onset of engine failure. This allows the operator to take action to reduce premature engine failure, damage and costly repairs to the equipment.

The system provides both an audible and visual warning and incorporates additional outputs for return to idle or shutdown modes.

Compact in design and easy to install, the engine protection system is an effective tool in the management of engine protection and engine maintenance for machines.

Features & Benefits

- ✓ Monitors critical engine functions
- Easy diagnosis of engine problems
- User friendly display
- Customised electronic circuitry
- Audible and visual warnings
- Australian made and tested
- Universal applications
- Multi voltage applications
- Tamper proof
- Guards against engine failure
- Reduces costly engine repairs
- Reduces operator responsibility
- Can be customised to suit machine type and operator requirements

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Directional Change Controller

Reduce machine wear and tear

The Muirhead® Directional Change Controller (DCC) is designed to help reduce excessive tyre wear, transmission damage, damage to cargo and unsightly tyre marks that can be the result of harsh gear changes.

By sensing the machine ground speed and gear selection, the DCC will inhibit a change of machine direction unless the machine has slowed down to a pre-set threshold whereby the opposite gear can then be selected.

Speed Sensor

The DCC senses the machine speed.

Gear Sensor

The controller senses when forward and reverse gears have been selected

Gear Lockout

The DCC will neutralise the directional gear change of the machine until it slows down to reach the pre-set threshold whereby the opposite gear can be selected.

Features

- ✓ Reduce excessive tyre wear
- Reduce excessive transmission damage
- Reduce excessive tyre marks
- Reduces unsafe driving practices
- Compatible with most 12 V and 24 V machines that use electric gear shifts
- Compatible with negative or positive switching via configuration settings
- Configurable gear change threshold
 can be set from 0 KMH to any speed





Pedestrian Alert System

For greater control in reducing incidents

RCT introduces the AusProTec TM Pedestrian Alert System to ensure the safety of site personnel. This advanced driver assistance system employs sophisticated Artificial Intelligence (Al) algorithms that can detect human-like forms in the camera's field of view.

This advanced solution provides machine operators with clear views of their vehicle's front, side, and rear and automatically provides audio and visual alerts to prevent collisions between vehicles and nearby pedestrians.

The Pedestrian Alert System can also be set to automatically activate additional safety systems such as speed limiters, extra warning lights/alarms, or to register in DVRs or fleet management systems.

The product has a wide detection area with a range of 0.5m to 12m (140° viewing angle) and may differentiate between objects and pedestrians. The solution is unique as its HD screen categorises site personnel within a 20-metre radius in red, amber and green fields while also providing an audible alarm. This feature provides drivers with more time to respond appropriately which enables safer driving practices.

The AusProTec™ Pedestrian Alert System improves operator confidence through increased visibility which in turn results in increased productivity. The system allows up to three cameras to be connected to the monitor at any time and can be configured to display certain camera views depending on machine gear selections. The durable camera can withstand the toughest conditions, making it ideal for mobile machines operating in the harshest environments. The optimal performance of the camera is ensured at all times thanks to its AI functionality which can be calibrated simply by using Wi-Fi, the camera's built-in app or via USB.

The AusProTec[™] Pedestrian Alert System is the most reliable way to safely manage machine-to-pedestrian interactions and prevent serious injuries.

view online

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Easy to install

Features

- Rear view detection distance of 0.5m 20m
- ✓ Full HD 1080p resolution
- Configurable visual detection zones
- Audible alarm output (12V / 250mA) to trigger other devices including alarms, lights and recorders

NOTE - This product is not (and should not be seen as) a substitute for human control, care and vigilance. Users should not overly rely or depend on the product but to use the product as an additional aid while exercising the same level of care and skill in operating the vehicle or machine.

Specifications

Resolution	1920 x 1080p
Viewing Angle	140°
Angle Range	0.5m – 20m (1.64ft – 65.61ft)
Voltage	10 – 32VDC
IP Rating	IP69K
Vibration / Shock Resistance	5.9G
Communication Interface	0.5m – 20m (1.64ft – 65.61ft)
Operating Temperature	-20°C - 70°C (-4°F - 158°F)
Storage Temperature	30°C - 80°C (-22°F - 176°F)
Minimum Lux	0.01lux





Rear Detection Systems

Be aware, be smart, be safe

The Sentry Rear Detection kit is specially designed for lift trucks and has the ability to detect objects from the face of the radar up to 30m (98').

The system accurately identifies the location and velocity of up to 16 people or objects simultaneously and built to withstand the harshest of conditions.

With built-in, fail-safe alerts that notify the operator of radar blockage or communication issues, operators and fleet managers can be sure that they are working with one of the most reliable object detection systems available.

The Industrial Sentry Rear Detection Kit is a plug-and-play, robust radar solution with a pre-configured sensor range. This kit comes with a preset $4.5\,\mathrm{m}\,\mathrm{x}\,2\mathrm{m}\,(14.7\mathrm{ft}\,\mathrm{x}\,6.5\mathrm{ft})$ sensor, in-cab LED display, $7.5\,\mathrm{m}\,(24.6\mathrm{ft})$ harness and $90\mathrm{-degree}$ mounting bracket.

Features

- ✓ Connects to reverse lights for power
- Pre-configured range: 4.5m x 2m (14.7ft x 6.5ft) Field programmable via Sentry Programming Unit
- ✓ Built to meet rugged J1455 specifications
- ✓ Utilises standard CAN communication protocols

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Specifications

Frequency	24Ghz
Current Draw	Less than 0.25A
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Sensor Dimensions	12.4cm x 10.3cm x 3.25cm (4.88" x 4" x 1.28")
Display Dimensions	2.54cm x 5.84cm x 5.08cm (1" x 2.3" x 2")
IP Rating	IP68 - IP69K
Pre-configured Range	4.5m x 2m (14.7ft x 6.5ft)





Fork Level Assist

Improve safety, productivity and eliminate damage

Even the best operators can make mistakes judging the tilt of their forks when entering or exiting pallets or stacking products.

The AusProTec $^{\text{TM}}$ Forklift Level Assist can combat this issue, regardless of the level of operator, by indicating the level of the forklift tines on a clear and easy-to-read display.

The main cause of product, rack and equipment damage is from forks being tilted at the wrong angle. If the forks are not level, drivers can spear product, damage racks or splinter pallets, especially if product is not stacked evenly which all results in costly damage. The Forklift Level Assist is a solution that will quickly pay for itself by reducing these damages.

Available in counterbalance or reach truck models. Extreme condition models available upon request.

Features

- ✓ Easy to install Less than 1 minute
- Accurate within 0.25 of one degree
- Environmentally sealed IP67 rated with CE Certification
- Adapts to bent or uneven forks
- Not permanently fixed to the forklift mast - No drilling required
- Motion activated No on / off switch
- Easy-to-read display

Specifications

Certifications	CE, ISO 9000/9001
Rating	IP67 rated
Working Temperature	-40° to 50°C (-40° to 120°F)
Batteries	Uses 2 x "D" size Batteries. 12 to 18 month battery life
Accuracy	Accurate to 0.25 of one degree
Warranty	2 years
Pre-configured Range	4.5m x 2m (14.7ft x 6.5ft)

view online





Laser Alignment Line Light

Guide fork tynes accurately

Using an integrated class II laser and a rechargeable battery pack, the Forklift Tyne Alignment Light, uses a horizontal laser beam to assist forklift operators to guide fork tynes into pallets accurately. The horizontal laser beam provides a green line that projects at the position of the forklift tynes thus allowing easy tyne alignment. The rechargeable battery pack provides between 50-70 hours of operational time. The operator uses a remote control to turn the alignment

Features

- Class 2 laser technology
- Wavelength 515 nm with integrated line generating lens Lifespan of 30,000 hours
- Battery life: 50 to 70 hours
- Light and compact
- ✓ EMC-CE compliant

Sequential Seat Belt Controllers

For assisting operators

Operator safety is of paramount importance in any operation. Forklift operators neglecting to use a seatbelt are a hazard to both themselves and the operation.

To ensure that the forklift cannot be operated unless the seatbelt is securely fastened, RCT has developed the Muirhead Sequential Seatbelt Controller

The Sequential Seatbelt Controller (SSBC) is one of the most cost effective, smart technology, seat belt interlock systems in the forklift market.

The controller is programmed to assist operators in following the correct sequence when applying their seatbelt. The SSBC prevents operation if the correct sequence is not followed and will immobilise the machine. A visual warning alerts the operator 5 seconds before immobilisation.

The kits are designed to suit all forklifts and can also be customised for plug and play installation for specific brands.

Kits are supplied in low voltage 10 – 30 V and high voltage battery electric 36 – 48 volts. Kits can include seatbelt and buckle if required.

Features

- Designed to meet Australian Standards
- Quick installation time
- ✓ Programmable engine shutdown time
- ✓ Fully sealed product to suit all conditions
- Improves operator safety
- ✓ Industry proven technology













SmartLight Awareness Technology

Be SAFE, Be SMART, Be SEEN



Available in blue and red beam, these lights are specifically designed to project a visual caution mark onto the floor of your warehouse, alerting nearby people and other machine users that a vehicle is approaching.

<u>view online</u>





Specifications

Voltage	9 - 80 VDC
Power	7 x 3 Watt Cree leds
Dimensions	130 x 150 x 80mm
Material	Diecast aluminium housing
Reflector and lens	Polycarbonate
Mounting bracket	Stainless steel
Termination	500mm flying lead
Waterproof rating	IP67
Hours lifespan	30,000+
Beam Pattern	Arc

Line Light LED

Available in blue and red beam, these lights are specifically designed to project a visual caution mark onto the floor of your warehouse, alerting nearby people and other machine users that a vehicle is approaching.

view online





Specifications

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Voltage	10 - 80 VDC
Power	5 x 3 Watt Cree leds
Dimensions	115 x 85.87 x 74mm
Material	Diecast aluminium housing
Reflector and lens	Polycarbonate
Mounting bracket	Stainless steel
Termination	500mm flying lead
Waterproof rating	IP67
Hours lifespan	30,000+
Beam Pattern	Line

'SmartSpot' Warning Light

Available in blue and red beam, these lights are specifically designed to project a visual caution mark onto the floor of your warehouse, alerting nearby people and other machine users that a vehicle is approaching.

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Specifications	
Voltage	9 - 80 VDC
Power	2 x 3 Watt Cree leds
Current Draw	0.49 A @ 9 V 0.027 A @ 80 V
Material	Diecast aluminium housing
Reflector and lens	Polycarbonate
Mounting bracket	Stainless steel
Termination	300mm flying lead
Waterproof rating	IP67
Beam Pattern	Spot

SmartArrow LED

Available in a distinct blue beam, this light is specifically designed to project a directional arrow, as a visual caution onto the floor of your warehouse; alerting nearby personnel and other machine users of the direction that a vehicle is approaching.

<u>view online</u>





Specifications

Voltage	10 - 80 VDC
Power	10 W
Dimensions	82 x 80 x 80mm
Material	Diecast aluminium housing
Reflector and lens	Polycarbonate
Mounting bracket	Stainless steel
Termination	500mm flying lead
Waterproof rating	IP67
Hours lifespan	50,000

SmartBeacon Range

The SmartBeacon range is a cost-effective solution for your visual alert needs. Available in three different sizes, this product has been specifically designed to alert nearby people and other machine users if a machine is operational.

view online





Specifications

	16180	16181	16182
Voltage	10 - 110 VDC	10 - 110 VDC	10 - 110 VDC
Power	10 W	15 W	15 W
Output	300 Lumen	450 Lumen	450 Lumen
Dimensions	130x130x95mm	75x75x160mm	95x95x130mm
Housing	Polycarbonate	Polycarbonate	Polycarbonate
Lens	Polycarbonate	Polycarbonate	Polycarbonate
IP rating	IP67	IP67	IP67
Hours lifespan	50,000	50,000	50,000

Colour Change LED Mini Light Bar

The AusProTec $^{\text{TM}}$ LED colour change light bar is cleverly designed to make surrounding personnel aware of a machine's status. A trigger wire will interchange the light from amber to green to convey whether the machine is safe to approach.

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Specifications

Voltage	12 - 30 VDC
Max Current Draw	3 A @ 12 V
Flash Patterns	14
Mounting	4 x M5 Bolts
Lens	Poly carbonate
Housing	Aluminium
Cable Length	0.4m
Weight	1kg
Light Source	4 x 4 LED Modules
Flash Colour	Amber / Green
Ingress Protection	IP67



LED Work Lights

Reliable, affordable lighting for harsh conditions

Representing the latest in high output lighting technology, the AusProTec™ Compact LED work light is robust, powerful and resistant to shock, vibration, dust and moisture.

With solid-state LED construction and a fully sealed housing (rated to IP67), this LED work light takes durability and reliability to the next level.

This work light features rugged and lightweight diecast alloy housing, stainless steel mounting hardware, and virtually unbreakable polycarbonate optical lenses. Containing 4 x 3 watt LED's, this multi voltage unit has a 950 lumen output making it a perfect solution for your compact lighting application.

Specifications

Voltage	10–32 VDC
Output	950 lumen (4x 3 W LEDs)
Current Draw	0.5 A @ 24 V
Dimensions	92mm (H) x 70mm (W) x 29.4mm (D)
Beam Pattern	60° extra wide
Beam Distance	95m @ 1 lux



Rear Vision Camera Systems

For maintaining clear vision day or night!

The Maxi Vision® camera systems offer machine operators a new perspective on driving and operating their equipment. The range of single and multiple camera systems provide end users with different choices on the best camera system set up to suit their application.

The Maxi Vision® range of colour LCD monitor and camera options are robust in design and are ideally suited to industrial and mining applications. Heavy duty casing and mounting options are also available to suit custom applications.

Widen your view towards machine safety and productivity.

Components & accessories

Refer to camera kits and components guide

Custom camera kits to suit specific applications available on request. Components differ between kits.

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Maxi Vision® Mast Camera Kit

Clear vision reduces product damage costs

The Maxi Vision* Camera systems offer forklift operators a new perspective on driving and operating their equipment. The camera systems are designed to enhance safety by improving the operator's vision when performing such tasks as lifting, transporting loads or reversing the forklift. The systems are suitable for use on small or large forklift trucks, battery electric or I/C models.

The Maxi Vision* range of colour LCD monitor and camera options are robust in design and are ideally suited to industrial equipment. Heavy duty casing and mounting options are also available to suit custom applications.

The camera system has been designed to suit forklifts and includes pulleys, heavy duty cabling, special mounting and fittings to enable reliable installation to most battery electric and IC forklifts. So look forward to a safer view on forklift safety whilst improving productivity!

Features

- ✓ Multiple camera options available
- Customised systems available on request
- ✓ 12/24 V application
- ✓ 36/48 V application with addition of voltage regulator
- Simple to use, reliable in operation and easy to maintain
- Compatible with small or large forklifts
- Clear vision whilst lifting, transporting loads and reversina
- ✓ Industry proven reliability

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Compact 2 Camera DVR Recorders

Clear, precise, and compact

The AusProTec™ Maxi Vision Compact 2 Camera DVR Recorders have been designed to assist with in-cab and forward monitoring on mobile equipment. These multivoltage units come complete with inbuilt forward and reverse cameras, SD card, GPS and G-shock sensors. Images can be easily downloaded and viewed utilising the supplied PC Viewer software.

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DVR Wireless Camera Kits

Close up views of the work area from a safe distance area

Working on mobile equipment is potentially hazardous at times. The AusProTec™ 9″ DVR Wireless Camera Kits are designed to make tasks safer and easier to undertake. It provides personnel with clear and closer views of the work area and the task at hand. It also eliminates the need for personnel to be in high-risk areas; reducing workplace health and safety risks

Designed for closed cab / internal warehouse operation, these kits have optional magnetic camera and monitor mounting options and come complete with a rechargeable battery pack (up to 8 hours of operation), allowing the camera to be positioned anywhere prior to the work being commenced.

With a strong digital signal, the AusProTec™ DVR Wireless Camera Kits are built to withstand the harshest of conditions, with easily installed wireless technology there is no need to run cables through machinery.

If a hard-mounted solution is required, the camera can be wired directly to localised machine power, such as the rear lights.

Please note: The DVR Wireless Camera Kits are a standalone wireless system, therefore, it is not dependent on a site's network.

Features

- Quick and adaptable relocation of cameras for new tasks
- Flexible hardware solution for all mobile equipment applications
- Easy to use functionality
- No EWP, ancillary maintenance personnel required to deploy cameras
- ✓ Up to 100m (328ft) transmission distance.
- ✓ Built-in 2.4GHz-2483.5GHz digital wireless transmitter
- ✓ 28 infrared lights 20m (65.6ft) night vision distance
- Backlit monitor controls for night vision
- Waterproof camera housing





RCT Online Parts Catalogue

RCT catalogue has a huge range of specialised electrical parts including voltage reducers, solenoids, switches, battery connectors and Deutsch kits.

Solenoids

RCT's Solenoids has been compiled to suit your desired application. A choice of type, models and voltages are available.

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Voltage Reducers / Regulators

Voltage reducers / regulators have been developed to provide multiple solutions for your voltage reducing / regulating needs.

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Coolant Level Kits

Monitor engine coolant levels on motor powered equipment to prevent premature engine failure.

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Battery Isolators

Supplied by a range of manufacturers such as Cole Hersee, Locksafe, Bosch and Lucas, available in 12 or 24 V, single or double pole and suited for universal application. We have a selection of the most reliable and cost effective isolators available.

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Switches

RCT range of pressure and temperature switches are designed to optimise your equipment operation.



Deutsch Kits

RCT stocks a large variety of Deutsch Kits.

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Specialised Auto Electrical

Specialised auto electrical parts and solutions for industrial, mining and heavy-duty applications.

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RCT is your supply expert for those difficult to find parts

2500+ parts, including:

- ✓ Alarms
- ✓ Beacons
- Circuit breakers
- Connectors & contacts
- Plugs & pins
- Gauges
- Instruments
- Rear vision cameras
- Seals

- Senders
- Solenoids
- Strobes
- Switches
- Timers
- Valves
- ✓ Wiring systems
- Customised electrics and much more...









NORDICLIGHTS (





















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