# INDUSTRIAL PRODUCT RANGE

Logistics | Transport | Civil | Commercial

RCT
Powered by Epiroc

# Integrate RCT's agnostic solutions to unlock peak performance

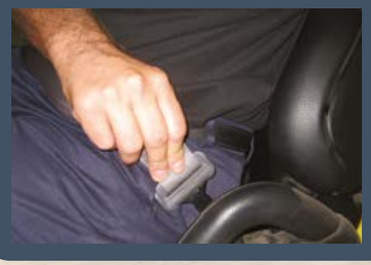
## SmarTrack Fleet Management

Email alerts and reporting

Speed zoning

No seatbelt alert

## Sequential Seat Belt Controller



## Speed Limiter

Speed zoning up to 50 zones

## Speed Zoning

Speed zoning up to 4 zones

## Speed Gates

## Pedestrian Alert

Triggers speed reduction

Triggers speed reduction

## Rear Detection

*Loud audible alarms, safe-to-approach lights, or warning lights can be added to further enhance the integrated solution. By doing so, operators and site personnel gain clearer cues that support safer, more confident decision-making.*

# SmarTrack Fleet Management

## Optimizing materials handling operations worldwide

The innovative solution provides relevant, customized information in real-time to employees at every level of the supply chain. The system can be installed on a diverse range of construction 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 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 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** uses a dedicated output to control a speed-limiter when moving between zones

**Machine utilization** is able to be shown by multiple inputs from travel, hydraulic pump

**Battery voltage monitoring**

**Critical output** relay available to interface with machine and accessories activated by critical events such as checklist, impact, and excess idle

# 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

**Operates 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 machine accidents, the Muirhead Speed Limiter provides a safe reliable solution for controlling speed in most machine applications.

The system is designed to interface into machine wiring either as a plug and play or following simple instructions.

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

The 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 machine safety.

**Reduces** speed related injuries

**Reduces** fuel, running and maintenance costs

**Extends** machine service life

**Assists** in maintaining OHS procedures

**Secure** speed programming

# GPS Zone Controller

## Keeps you and 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

# Engine Protection System

## Monitoring critical engine functions

The Muirhead Engine Protection System (EPS) 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 EPS is an effective tool in the management of engine protection and maintenance.

### Features

**Monitors** critical engine functions

**Easy diagnosis** of engine problems

**User friendly** display

**Audible and visual** warnings

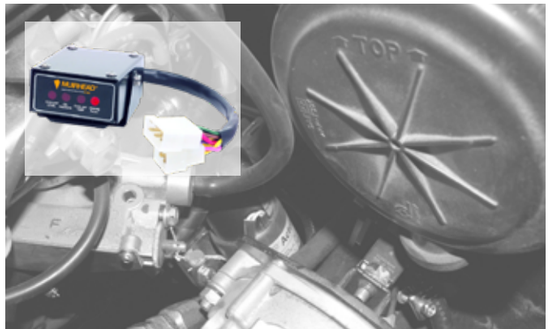
**Multi voltage applications**

**Tamper proof**

**Guards** against engine failure

**Reduces** costly engine repairs

**Customized** to suit machine type and operator requirements



# Directional Change Controller

## Reduce machine wear and tear

The Muirhead Directional Change Controller (DCC) is designed to help reduce excessive tire wear, transmission damage, damage to cargo and unsightly tire 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 neutralize 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 tire wear

**Reduce** excessive transmission damage

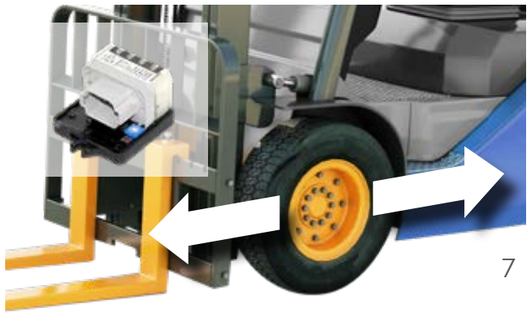
**Reduce** excessive tire marks

**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

Introducing the Pedestrian Alert System to ensure the safety of site personnel. This advanced driver assistance system employs sophisticated Artificial Intelligence (AI) 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 categorizes 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 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 Pedestrian Alert System is the most reliable way to safely manage machine-to-pedestrian interactions and prevent serious injuries.

*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.*

### Features

**Easy** to install

**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

### Technical 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 |



# Sentry Rear Detection

## Instant alerts, trusted protection

The Sentry Rear Detection kit is designed for all equipment 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 Sentry Rear Detection kit is a plug-and-play, robust radar solution with a pre-configured sensor range. This kit comes with a preset 4.5m x 2m (14.7ft x 6.5ft) sensor, in-cab LED display, 7.5m (24.6ft) harness and 90-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

**Utilizes standard CAN** communication protocols

### Technical 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) |

# Forklift 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 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

### Technical 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) |

### Part number

16717

# Sequential Seatbelt Controllers

## First buckle, then drive

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

To ensure that the machine cannot be operated unless the seatbelt is securely fastened, RCT has developed the Muirhead Sequential Seatbelt Controller (SSBC).

The SSBC is one of the most cost effective, smart technology, seat belt interlock systems in the 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 immobilize the machine. A visual warning alerts the operator 5 seconds before immobilization.

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

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

### Features

- **Quick** installation time
- **Programmable** engine shutdown time
- **Fully sealed** product to suit all conditions
- **Improves** operator safety
- **Proven** technology

## Arc Light LED

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

### Technical 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 ground, alerting nearby people and other machine users that a vehicle is approaching.

### Technical specifications

| | |
|---|---|
| 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 ground, alerting nearby people and other machine users that a vehicle is approaching.

### Technical specifications

| | |
|---|---|
| Voltage | 9 - 80 VDC |
| Power | 2 x 3 Watt Cree LEDs |
| Current Draw | 0.49 A @ 9 V<br>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 ground; alerting nearby personnel and other machine users of the direction that a vehicle is approaching.

### Technical 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.

### Technical 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 |
| Waterproof rating | IP67 | IP67 | IP67 |
| Hours lifespan | 50,000 | 50,000 | 50,000 |

## Color Change LED Mini Light Bar

The RCT LED color 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.

### Technical specifications

| | |
|---|---|
| Voltage | 12 - 30 VDC |
| Max Current Draw | 3 A @ 12 V |
| Flash Patterns | 14 |
| Mounting | 4 x M5 Bolts |
| Lens | Polycarbonate |
| Housing | Housing |
| Cable Length | 0.4m |
| Weight | 1kg |
| Light Source | 4 x 4 LED Modules |
| Flash Color | Amber / Green |
| Waterproof rating | IP67 |



# SmartLight Awareness Technology

## Be safe, be smart, be seen

# LED Work Lights

## The pinnacle of high output lighting technology

Our state-of-the-art LED work lights are built to endure the toughest conditions. Resistant to shock, vibration, dust, and moisture, they offer unmatched durability and reliability with solid-state LED construction and a fully sealed housing.

Featuring rugged, yet lightweight diecast alloy housing, stainless steel mounting hardware, and virtually unbreakable polycarbonate lenses, these lights can handle anything.

Elevate your worksite illumination with our premium LED work lights – where exceptional performance meets unbeatable toughness.

### Technical specifications

| | Work Lamp 12W 9-32V Part no. 17534 | Work Lamp 12W 10-32V Part no. 17553 | Heavy-Duty LED Light Part no. 12194 | Compact Work Lamp Part no. 16652 |
|---|---|---|---|---|
| LED | 4 x 3W | 4 x 3W XTE (CREE) | 8 x 3W | 4 x 5W |
| Beam | 60° | 40° | 60° | 40° |
| eLumens | 950 Lu | 1081 Lu | 2980 Lu | 1200 Lu |
| rLumens | 2000Lu | 1544 Lu | 2047 Lu | 840 Lu |
| Voltage | 9-32V DC | 10-32V DC | 9-52V DC | 12-52V DC |
| IP Rating | IP69 | IP67 | IP69 | IP68 |
| Connector | 2-pin Deutsch | 2-pin Deutsch | 2-pin Deutsch | 2-pin Deutsch |
| Dimensions | 92mm x 70mm x 49.4mm (3.62" x 2.75" x 1.94") | 91mm x 70mm x 39.9mm (3.58" x 2.76" x 1.57") | 100mm x 120mm x 80mm (3.94" x 4.72" x 3.15") | 65mm x 85mm x 109.5mm (2.56" x 3.35" x 4.42") |
| Weight | 0.40kg (0.88lbs) | 0.41kg (0.9lbs) | 1.74kg (3.83lbs) | 760g (1.68lbs) |

# Maxi Vision camera range

## Operate with confidence day and night

Maxi Vision cameras are engineered to meet the tough demands of construction sites, where safety and visibility are non-negotiable. The range delivers a comprehensive view of the machine's surroundings, helping to eliminate blind spots and prevent collisions with personnel, obstacles, or infrastructure.

With crystal-clear, high-definition imaging, even in low-light or dusty environments, operators gain the confidence to navigate complex worksites safely. By reducing stress and improving spatial awareness,

Maxi Vision helps crews stay focused and efficient, no matter the conditions.

## Features

**Made with heavy-duty materials** to withstand vibration and extreme temperatures.

**User-friendly "plug and play" design** allows seamless installation.

**Add more cameras** that can be tailored to the needs of your growing fleet, providing consistent and reliable performance across all machines.

**A range of mounting options available,** enabling the cameras to be positioned in the most effective locations for maximum coverage and visibility.

**Sleek and unobtrusive cameras** that blend seamlessly with vehicle aesthetics without compromising functionality.

**Designed for durability and low maintenance,** reducing the need for frequent repairs or replacements

# Maxi Vision Forklift mast camera kits

## Clear vision reduces product damage costs

Provide 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 kits 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

**Customized** systems available on request

**12/24 V application**

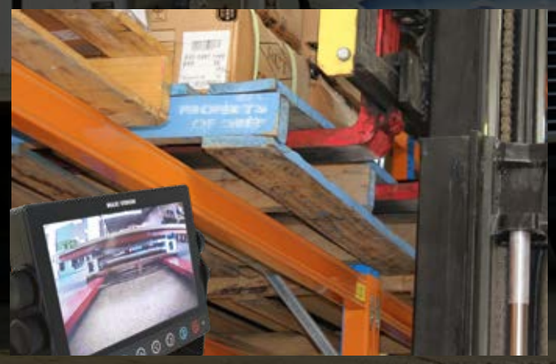
**36/48 V application** with addition of voltage regulator

**Simple to use,** reliable in operation and easy to maintain

**Compatible** with small or large forklifts

**Clear vision** whilst lifting, transporting loads and reversing

**Industry proven** reliability



# Compact 2 Camera DVR Recorder

## Clear, precise, and compact

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

# DVR Wireless Camera Kit

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

Working on mobile equipment is potentially hazardous at times. The Maxi Vision DVR Wireless Camera kitis 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.

The kit comes with magnets, sturdy mounting brackets and rechargeable battery pack allowing the camera to be positioned anywhere prior to the work being commenced.

With a strong digital signal, it's 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 localized machine power, such as the rear lights.

*Note: The DVR wireless camera kit is a standalone wireless system, therefore, it is not dependent on a site's network.*

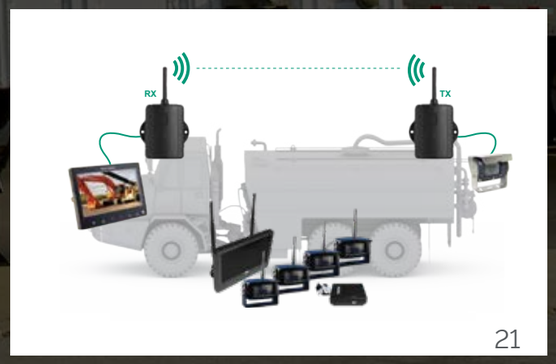
### Features

**Up to 100m (328ft)** transmission distance

**Built-in 2.4GHz-2483.5GHz** digital wireless transmitter

**28 infrared lights** – 20m (65.6ft) night vision

**Backlit monitor controls**



# RCT Online Parts Catalogue

## RCT is your supply expert for those difficult to find parts for industrial, mining and heavy-duty applications.

### 6-32 Volt LED pilot lights

Compact in design and highly resistant to vibration, dust and moisture. Say goodbye to costly downtime from frequently replacing standard incandescent globes. These lights are more tolerant of voltage changes and spikes, ensuring reliable performance. Available in four colors: red, green, yellow and blue.

### Deutsch connectors

Our single contact system terminates all Deutsch connectors with ease. The popular DT series connectors, crafted from impact-resistant thermoplastic, endure temperatures up to 125°C. With integral silicone wire seals, there's no need for additional sealing once connected.

### Coolant level kits

Monitor coolant levels effortlessly to avoid premature engine failure. Traditional gauges often miss fluid loss due to blown hoses or cracked seals. RCT Coolant Level Kits alert operators when coolant is dangerously low, allowing timely preventive action and saving your engine from major damage.

### 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.

## Explore more at rct-global.com/store

2500+ parts, including:

- Alarms
- Beacons
- Circuit breakers
- Connectors and contacts
- Plugs and pins
- Gauges
- Instruments
- Rear vision cameras
- Seals
- Senders
- Solenoids
- Strobes
- Switches
- Timers
- Valves
- Wiring systems
- Customized electrics and much more...

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