

INDUSTRIAL RADIO REMOTE CONTROL

CATTRON GROUP INTERNATIONAL™

HAS ASSEMBLED THE MOST

COMPREHENSIVE COLLECTION OF

RADIO REMOTE CONTROL BRANDS

FOR CRANES, LOCOMOTIVES,

MATERIAL HANDLING EQUIPMENT,

MINING MACHINERY, MOBILE

EQUIPMENT, SHIP LOADERS,

AGRICULTURAL MACHINERY, AND

VIRTUALLY ANY EQUIPMENT WHERE

THE OPERATOR CAN BE MOVED TO A

SAFER, MORE EFFICIENT LOCATION

REMOTE CONTROL SOLUTIONS FOR

RAIL APPLICATIONS



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ACCUSPEED"

BELTPACK

REMTRO

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Cattron Group International™ is a leading manufacturer of remote control products and aftermarket services for industrial, mining, commercial. mobile, railroad and other industrial markets, globally. In addition to its North American operations with two locations in the USA (Sharpsville, PA & Escondido, CA) and Canada (Georgetown, ON & Montreal, QC), Cattron has operations in Europe (Germany & UK), South Africa (Johannesburg), Brazil (São Paulo) and China (Shanghai); supported by an extensive sales and distribution network throughout North and South America, Asia, Africa and Australia.

Cattron Group International's Satisfied Customers:

- **Union Pacific**
- CSX
- **BNSF**
- Norfolk Southern
- Cargill

Through a process of organic growth and acquisitions, the Cattron Group has assembled the most comprehensive collection of radio remote control brands. Anywhere the operator of a machine can be moved to a safer, more efficient location, Portable Radio Remote Controls have helped prevent serious injury while increasing efficiency and productivity. The Cattron Group is leading the way with advanced technological innovation, experience and quality backed by an unparalleled worldwide service organization.

Most industrial applications are built around one of our core brands, Cattron®, Remtron® or Theimeg™.

The Cattron® brand of engineered products are designed primarily for electric overhead cranes, locomotives, material handling equipment, mining machinery, ship loaders, and agricultural machinery.

The Remtron® brand of industrial remote controls is used in both material handling (electric overhead cranes) and commercial industries. In addition to industrial radio remote controls for overhead cranes, the Remtron® brand products are also used for mobile equipment, commercial and construction applications such as concrete pumps, conveyors, winches, booms and others.

The Cattron Group and global affiliates service a customer base of approximately 6,000 companies with over 1,300 combined ACCUSPEED/Beltpack Class 1 systems and over 200 installed short line systems; supported by a network of partners (suppliers, sales, distribution and service representatives) in 34 countries. The Cattron Group has provided remote control solutions to industry since 1946.













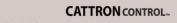




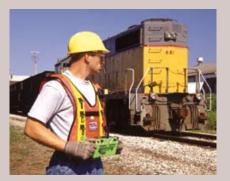




<u>remtron</u>



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ACCUSPEED

Leading Technology in Automatic Speed Control

The ACCUSPEED™ system uses the latest technology to provide the features necessary for safe, efficient and accurate operation of remote controlled locomotives. Equipped with Synchronized Time Sharing™ (STS), you can control multiple locomotives on a single or half duplex wireless channel.

ACCUSPEED™ FEATURES:

- LIGHTWEIGHT ERGONOMIC GREEN OCU
- SYNCHRONIZED TIME SHARING (STS™)
 - UP TO 10 SYSTEMS ON ONE FREQUENCY
- DIGITAL TALKBACK® WITH "INFOLINK"
- PITCH AND CATCH TRANSFER CONTROL BETWEEN OPERATORS
- **ELECTRONIC POSITIONING DETECTION (EPD)**
 - LIMIT OPERATIONAL AREA OF REMOTE CONTROL OPERATIONS
- SPEED CONTROL ADJUSTS THROTTLE AND TRAIN BRAKES

BELTPACK® allows yard operators to control driverless, microprocessor-equipped switching locomotives using a battery-operated portable Operator Control Unit (OCU). What makes BELTPACK® revolutionary is BELTPACK's® Brain in the Train™, an advanced onboard microprocessor programmed with the industry's best train handling practices.

Other unique features are Dynamic Speed Control™ which gives • the operator complete control over train speed and more time to concentrate on his surroundings and the movement of the train; Protective Pitch and Catch™ for safe and efficient dual-operator control and tilt detection, which will automatically sound an alarm . and bring the train to a controlled stop if the OCU is tilted more • than 45 degrees off the vertical.

BELTPACK FEATURES:

- 24/7 HELP DESK
- TRAINING SERVICES (OPERATIONS & MAINTENANCE)
- SUPPLY OF PARTS AND COMPONENTS/REPAIR SERVICES
- APPLICATION ENGINEERING AND CUSTOMIZATION
- INSTALLATION AND COMMISSIONING SERVICES
- LRC MODE YARD EFFICIENCY REVIEW

RCL-II

RCL-II offers new and innovative ways to improve operations, including minimal fuel usage and the ability to connect locomotives to other electronic yard systems. There are 12 serial ports available with 2 Ethernet, 2 CAN, 2 USB and 2 SPI. GPS tracking is available along with being ABSCO compatible.

RCL-II offers improved operations as well as less down time. Included are improved support tools and remote diagnostics that allow you to more efficiently manage your asset and improve your up time. Also available is CattronConnect™, a secure web-based platform for dynamic operations reports.



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MOTE CONTROLS

QC SPEED CONTROL



The QC Speed Control is the newest interchangeable portable control system that works exclusively with RCL-II technology. It is designed to work with locomotives equipped with the American Association of Railroads (AAR) standard Multiple Unit connections. The QC Speed Control offers Independent and Train Brake Control, Speed Control, Bail

Control, RCL Horn, RCL Bell, STS and CattronConnectTM. At around 80lbs and only one enclosure; it's the lightest and easiest installing unit on the market. Offering flexible configurations and more features than any other portable system on the market makes it the best value for your money.



Quick Connect System for Rail

The QC is a standardized interchangeable portable control system designed to interface with locomotives

2004

equipped with American Association of Railroads (AAR) standard Multiple Unit (MU) connections. This makes the QC an extremely cost effective solution when the need arises to control more than one locomotive at your operating facility.

The QC Locomotive Radio Remote Control System offers the dependability and safety required for operating locomotives in harsh industrial locomotive and railroad environments. A typical QC comprises of: [1] a portable radio remote Operator

Control Unit (OCU – optional Paddle-type or Lightweight Ergonomic), (2) a portable locomotive mounted NEMA 4 (IP66) watertight enclosure containing the Locomotive Computer Unit (LCU), and (3) a portable locomotive mounted NEMA 4 (IP66) watertight enclosure containing an Electro-pneumatic interface.

MP96RCL

Locomotive and Industrial Remote Control System

The MP96RCL is our non-speed control top of the line locomotive radio remote control system with many ACCUSPEED features and all of the quality and reliability. Offering the safety and dependability required for operating machinery in harsh industrial environments, the MP96RCL enables one operator on the ground to effectively control switching operations and train movements. The system provides the all important extra margin of safety by enabling the operator to input all commands out of harm's way while having greater visibility along the length of the train.

MP96RCL FEATURES:

- STANDARD THROTTLE/BRAKE LOCOMOTIVE SYSTEM
- CONFIGURABLE WITH LIGHTWEIGHT INDUSTRIAL TOGGLE
 OR PADDLE OCU
- PITCH AND CATCH TRANSFER CONTROL BETWEEN
 OPERATORS
- RANGE LIMITING, CLOSE START AND DIGITAL TALKBACK®
- DATA-LOGGING WITH OPTIONAL EVENT MONITORING
- "WATCH-DOG" TIMERS ENSURE NO MOTION IS CARRIED
 OUT WITHOUT AN OCU COMMAND
- OPTIONAL EVENT RECORDER MONITOR BOTH RADIO
 AND LOCOMOTIVE FUNCTIONS



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RAILCAR MOVERS

Control Railcar Movers in Your Yard

It takes only one operator on the ground to effectively control any switching operation with PRRC. The system provides the allimportant extra margin of safety by enabling the operator to input all commands out of harm's way while having greater visibility along the length of the train. The MP96 Railcar Mover system



is especially beneficial for positioning of railcar wheels for machining. The wheels must be positioned exactly during the trueing procedure. PRRC enables the wheels to be contoured while they remain on the railcars and are machined to tolerances. With its powerful multi processor system, the MP96 provides high message data security along with simultaneous and independent data signal pro-

System Features:

- MULTIPLE SYSTEMS ON ONE FREQUENCY
- UP TO 48 INPUTS AND 96 OUTPUTS FOR COMPLETE CUSTOMIZATION
- " RIDE THROUGH" TIME DURING INTERRUPTIONS
- DATA LOGGING, WITH TIME AND DATE STAMP
- **EXTENSIVE EMI/RFI PROTECTION**
- EASE OF MAINTENANCE
- CAN BE CONFIGURED WITH DIFFERENT CONTROLLER (TRANSMITTER) STYLES

ELECTRONIC POSITION DETECTION**PULLBACK



Electronic Position Detection (EPD) from Cattron Group International is the most advanced technology available for providing Pullback protection and other zone sensitive operational backup control. Combining position sensing information from track tran-

sponders with verification by GPS technology, EPD provides a positive means of initiating pre-programmed position-specific train operation commands such as speed override and stop.

Pre-defined speed reduction zones called a "pullback lead" contains up to eleven passive transponders (pucks) that are placed along the track at positions where a speed reduction is required by the radio controlled locomotive. It may proceed through a Pullback zone to the next puck, usually from '10 mph' to 'STOP' in 1 MPH decrements. If the backup GPS communication and verification is lost for any reason, the locomotive will be brought to an immediate controlled stop.

The EPD redundancy of the system ensures safe. operation of your locomotives.

BALLAST CARS

Control Unloading of Ballast Cars

Manually opening and closing ballast car hopper doors exposes an operator to silica dust, possible injuries from manual operation of the release levers and walking close by a moving train. By installing a Cattron® Radio Remote Control on the hopper doors, the operator can operate from a safe distance.



System Features:

- CONTROL BALLAST RELEASE DOORS AND OTHER FUNCTIONS
- SELECT DIFFERENT HOPPER CARS FROM THE CONTROLLER
- FAST COMMAND RESPONSE FOR QUICK SHUT OFF
- CONTROL BALLAST DOORS OR OTHER AUXILIARY FUNCTIONS INDEPENDENTLY OR SIMULTANEOUSLY





"Virtual Inspection" of your Equipment

CattronConnect™ is the newest, most advanced service offered from Cattron Group International. In conjunction with the RCL-II upgrade, CattronConnect™ provides remote monitoring of locomotive health, real-time data

logging & alarm notifications along with constant monitoring of critical components.

CattronConnect™ also enables access to your own customizable website and emails notifying you of defined faults and failures. Customizable web based reports



are available that can show productivity, speed violations, wheel slip, along with anything else you want to monitor. No matter where you are, with CattronConntect™ you'll have everything you need to motor your locomotive's health in one place.

- TROUBLESHOOT ISSUES ON EQUIPMENT
- MONITOR FROM COMPUTER, PDA OR CELL PHONE
- CUSTOM SERVICE REPORTS
- INCREASE UPTIME AND REDUCE MAINTENANCE TIME
- 24/7 FULL SERVICE HELP DESK



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THE CATTRON GROUP BRAND OF REMOTE CONTROL SYSTEMS IMPROVE SAFETY, EFFICIENCY AND PRODUCTIVITY THROUGH:

- POSITIONING OPERATORS IN THE BEST VISIBLE LOCATION
 - ELIMINATING THE USE OF PENDANT/CAB CONTROLS
 - OPERATOR CONTROL UNITS ARE LIGHTWEIGHT AND ERGONOMIC





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