



Photo Courtesy: Hawthorne Machinery Co. San Diego, CA

The **wireless** revolution has spread to the control of equipment. More and more people appreciate the added convenience, productivity, and safety provided by wireless controls. Past concerns about the reliability and **safety** of wireless control have been answered by development of **reliable** wireless technology and many years of **proven** service. Wireless control is now a proven and relatively **simple** way to get more from industrial and commercial equipment, and to improve operations.

Reliable and safe wireless control equipment is now available and operators are accustomed to the **convenience** of wireless controls in their every day lives. Increase the return on investment on your equipment and realize the following **benefits** of wireless controls:

- Productivity
- Safety
- Ergonomics
- Task Control
- Convenience
- Competitiveness
- Profitability
- Workers Satisfaction

Remtron offers **world class**, state-of-the-art technology. Our products are designed specifically to handle critical industrial and construction tasks and to deliver reliable and safe **performance**. Remtron's 900 MHz Command Pro series offers advanced signal processing that provides worry free operation.

Our newest wireless control system, the "Patriot," is designed as a standard control system. Packed with all the latest technology, this system will provide years of operation.



Operating Reliability – Advanced decoding algorithms guard against drop out due to interference.

Safety of Operation – Cyclic Redundancy Codes and unique identifiers protect against false commands. Electronics are designed for fail safe operation to protect against equipment failure.

Low Maintenance – Our equipment operates for over 130 hours of continuous use with standard AA batteries.

Ease of Use – Our patented 1,000,000 cycle rocker switches lead the industry in ergonomic, low stress design with exceptional tactile feel.

Long Life – We established our reputation as "Gorilla Tough" by using surface mounted electronics and exceptionally rugged transmitter cases



After being crushed by a forklift, the plant manager at Jorgenson Steel was amazed at how rugged our radio was and commented with "...and to our disbelief the box kept on working."

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Product Line

433 Series

Our 433 Series is a digital control system for applications that require a **high level** of reliability, integrity and durability. It is designed for short range, license free operation in North America and Europe for industrial and commercial operations. It is a very **affordable** system that is ideal for use close to vehicles and machinery.



Frequency – 433 MHz license free

Addresses – No repeat address, no cross talk

Range – 100 foot omni-directional range and impervious to dusty environments

Functions – Up to 8 functions

Transmitter:

- No external antenna required
- 1,000,000 cycle ergonomic switch with no wires
- Up to 4 rocker switches or 4 button switches
- 9 oz, 6.5" x 2.75" x 1.0"
- 9V alkaline battery powered

Receiver:

- Power: 120 VAC, 12VDC or 24VDC
- 8" x 5" x 2.5"
- 8 relays + one interlatched
- AutoLink™ for quick registration of new transmitters
- Attached or remote antenna

Command Pro Series

Our 900 MHz Command Pro Series is a complete set of interoperable receivers and transmitters to fit **every** application. Command Pro is a microprocessor-based **system** with 16 bit CRC to ensure error-free operation.



Frequency – 902-928 MHz license-free operation

Addresses – >65,000 unique address codes

Range – 1,000 foot line-of-site range

Functions – Up to 96 discrete and 8 analog functions

Response Time – 60 milliseconds.

Transmitter Management – Receivers may be programmed to operate with more than one transmitter, one at a time.

Programmable – Command Pro transmitters and receivers are completely programmable to fit your specific needs.

Maintain Link – Receivers constantly monitors the link to the transmitter to ensure positive control for critical functions.



Receivers

Remtron Command Pro receivers are designed to support a wide **variety** of applications. Interfaces are available for most applications including relays, analog, variable current and voltage, variable frequency, pulse width modulations and Control Area Network(CAN) serial bus.



Remtron's Pump Boss Receiver installed on a concrete line pump. Our attention to detail makes our receivers reliable, easy to install and service.

For ease of maintenance, the receivers are equipped with an **Autolink™** button for quick registration of new transmitters.

Antenna

Antennas may be attached to the receiver or installed separately to improve reception and permit internal mounting of receivers.

Environmental Protection

All our receivers are designed for IP 65 (NEMA 4X) protection against dirt, dust, rain, sleet, snow, hose, direct water, and corrosion. Operating temperature is -20° to 160° F (-29° to 71° C).

In any environment, our receiver cases will withstand anything you throw at it

Enclosures

Remtron provides receiver enclosures to fit the **application**, space available, environment and access required. We also provide electronics for **integration** into our customer's **packaging**.

Remtron Enclosures

Our unique and patented compact enclosures is made of extruded aluminum and is suitable for in-door and out door environments. Its rugged, compact design makes it suitable to install on trailers, trucks, mobile equipment and mobile cranes.



Standard Industrial Enclosures

We provide a complete array of industrial enclosures including fiberglass, steel and stainless steel for special applications.



Transmitters

Handheld Transmitters

Remtron leads the industry in rugged, ergonomic hand-held transmitters. Remtron Command Pro transmitters are easy and efficient to use without creating undue muscle stress.

Lever Style Configurations

Remtron can produce a Command Pro lever style transmitter in any configuration that is required to meet the user's needs. Here are a few examples:

T10



6" Configurations - Compact configuration that provides up to 10 control functions

T14/18



8" Configurations - Expands to 14 Control functions plus T12P proportional control

T20/23



12" Configurations - Expands to 23 Control functions



T44/46



T34/54



Batteries



For convenience of the operator, all Remtron Command Pro transmitters are powered by standard AA batteries. Transmitters will operate for over 135 hours of continuous use. Recharge-able AA batteries may be used.

Controls and Indicators



Remtron can **customize** a transmitter with a wide variety of **configurations** depending on your **needs**.

Handheld Transmitter Controls

- **Rockers** – Remtron’s patented rocker is unique in the market and offers the best tactile feedback control available for handheld transmitters.
- **Push buttons** – A variety of push buttons to fit any application.

Lever Style Transmitter Controls

- **Toggle Switches** – Standard two position momentary and maintained switches.
- **JoySticks and Levers**
 - One and two axis joy sticks
 - Multi-step, step-less and analog controls
- **Selector Switches**
 - Rotary switches to select programmed modes
- **Push-to-Operate Switches**
 - Button or Bar to activate controls
 - Key locks to prevent unauthorized use

Handheld/Platform Indicators

- LED status indicators



Accessories



- **Holsters** – Remtron’s sturdy leather holsters are available for all Remtron’s handheld transmitters. The holsters makes it convenient to operate the transmitter while on your belt.
- **Fixed Mounts** – Transmitters may be mounted to a fixed location using the Remtron transmitter mounts.

- **Antenna Mounting Kit** – The antenna may be mounted away from the receiver using the Remtron mounting Kit. The Kit includes a cable connectors and mounting bracket.
- **Shoulder Straps** – Shoulder straps are available for all Remtron transmitters.
- **RAC16A Handheld Programmer** – Completely portable and small enough to fit in a tool pouch, the RAC16A quickly changes access codes and some simple set-up parameters. It also transfers complete set-up information from a fixed computer site to a receiver.
- **RAC17A PC-based Programmer** – Operating under the Windows® environment, the RAC17A provides a convenient method to set-up a system for specific applications. Each file contains the equipment type, access code and parameters.



Remtron prides ourselves on our **engineering** capability to meet any customer's needs. Our products may be **customized** to fit your specific application.

Customization includes receiver and transmitter programming, labeling with customer functions and logos, specialized receiver connectors and cable lengths.

Application Development

Remtron is organized to quickly provide prototype configurations along with engineering **services** to support our customers new applications.



New Designs

All engineering and production are performed in-house at Remtron and are closely linked to permit the rapid development of new designs. Remtron is not limited to standard configurations in order to meet our customers needs.

Remtron has **produced** wireless control solutions for **hundreds** of specific and unique **applications** including the following:

- Amusement Ride E-Stop
- Coil Inspection Line
- Concrete Batch Plants
- Concrete Pumps
- Conveyor Safety Stop
- Crop Pilers
- Gantry Cranes
- Fire Fighting Equipment
- Grain Augers
- Earth Compactors
- Insulation Blowers
- Light Bars
- Jib Cranes
- Lumber Treatment
- Mailing/Sorting Equipment
- Manufacturing Equipment
- Mobile Cranes
- Monorails
- Monorail Cranes
- Overhead Cranes
- Paving Equipment
- Polar Cranes
- Portable Conveyors
- Road Grinders
- ROVs
- Screen Equipment
- Security Gates
- Soil Compactors
- Spreaders
- Stadium Lighting
- Swine Handlers
- Tractors
- Traffic Signals
- Trolley Booms
- Truck Equipment
- Truck Mounted Cranes
- Tub Grinders
- Tuggers Safety Stop
- Turntables
- Unloaders
- Utility Trucks
- Vacuum Trucks
- Water Tanks
- Water Treatment



Transmitters

Transmitter Model	433 Series											Command Pro										
	T08	T10	T14	T18	T20	T23	T12P	T34-3	T34-6	T44-3	T44-4	T46-5	T46-6	T54								
Type	Handheld	Handheld	Handheld	Handheld	Handheld	Handheld	Handheld	Belly Box	Belly Box	Belly Box	Belly Box	Belly Box	Belly Box	Belly Box								
Controls (Maximum Capacity)	8	8	12	18	20	22	12	40	40	40	40	60	60	40								
Discrete Rockers	4	4	6			9																
2-Step Rockers				3	3																	
Push Buttons	4	4	2	6	8	5																
Multiplex Selector				1	1	1		1	1	1	1	1	1	1								
Proportional Rockers							6															
Bi-Directional Levers								4	6	3	4	5	6	4								
Joy Sticks										3	3	5	5	4								
Toggle Switches										6	8	8	10	24								
ESTOP Button	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
ESTOP Mushroom Button																						
Push-to-Operate Bar																						
Maintained Link		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
Continuous Battery Op Hours	130	130	130	130	200	200	130	350	350	350	350	350	350	350								
Dimensions, Inches	6x3x1	6x3x1	8x3x1	8x3x1	12x4x1	12x4x1	8x3x1	5x9x6	5x9x6	5x10x7	5x10x7	5x13x7	5x13x7	5x10x8								
Weight, lbs	0.50	0.50	0.75	0.75	1.25	1.25	0.75	4.5	4.5	4.0	4.0	4.0	4.0	4.0								
Available	Now	Now	Now	Now	Now	Now	9/2003	Now	Now	Now	Now	Now	Now	Now								



Receivers

Receiver Model	433 Series											Command Pro										
	433R9	22R04	22R08	23R5	21R10	21R14	25R15	23R15	23R23	23R1P	21R22	23RCAN										
Interface Type	Relays	Relays	Relays	Relays	Relays	Relays	Relays	Relays	Relays	PWM and Relays	Analog and Relays	CAN										
Controls	8+1	4	8	4+1	10+2	14+2	15	15	23+1	16	22+	Variable										
Discretes				Yes	Yes	Yes	Yes	Yes	Yes	1	8	Variable										
Proportional				12 VDC	115/230 VAC	VAC	VAC	VAC	12/24 VDC	12/24 VDC	115/230 VAC	12/24VDC										
Maintained Link																						
Power	12 VDC	115/230 VAC	115/230 VAC	12 VDC	115/230 VAC	VAC	VAC	12/24 VDC	12/24 VDC	12/24 VDC	12/24 VDC	12/24VDC										
Optional Power		12/24 VDC	12/24 VDC		12/24 VDC	12/24 VDC																
Enclosure	Remtron Compact	Standard	Standard	Remtron Compact	Standard	Standard	Remtron Compact	Remtron Compact	Remtron Compact	Remtron Compact	Standard	Remtron Compact										
Dimensions, inches	8x5x2.5	8x6x4	8x6x4	8x5x2.5	10x8x4	12x10x5	10x5x2.5	10x5x2.5	9x5x2.5	9x5x2.5	14x12x6	7x5x2.5										
Available	Now	Now	Now	Now	Now	Now	Now	Now	12/2003	10/2003	Now	Now										