Pitch & Catch Feature
This feature allows two operators controlling one crane system from opposite ends of a long or cross travel.

Infrared Initial Startup Feature
This feature restricts initial system activation beyond 20–30 meters from the crane or receiver unit by means of infrared transmission.

Random Access Feature
This feature allows for up to 16 operators randomly accessing up to 16 crane systems via a 16-position selector switch.

Infrared Key

Tandem Feature (Dual-Crane Operation)
This feature allows two operators controlling two crane systems independently or one operator controlling two crane systems simultaneously (Crane A, B, A-B).

System Specifications

**TRANSMITTER**
- Frequency Range: PLL 433 MHz
- Transmitting Range: 100 Meters / 300 Feet
- Continuous Operation: 14–20 Hours (600mA)
- ID Code: 65,536 Sets
- Channel Spacing: 25kH
- Hamming Distance: 16
- Frequency control: Synthesizer (PLL)
- Frequency Drift: < 1ppm @ -25°C ~ 75°C
- Frequency Deviation: < 1ppm @ 25°C
- Spurious Emission: > 60dBc
- Transmitting Power: 0.3 – 1.8mW
- Emission: F1D
- Antenna Impedance: 50 Ohms
- Enclosure: IP-66
- Source Voltage: 7.2V (600mA or 1400mA)
- Current Drain: ~80mA
- Operating Temperature: -25°C ~ 75°C
- Dimension: 247mm x 154mm x 112mm
- Weight: 1.600g (include battery pack)

**RECEIVER**
- Frequency Range: PLL 433 MHz
- Sensitivity: -125dBm
- Decoding Reference: FSK
- ID Code: 65,536 Sets
- Channel Spacing: 25kH
- Hamming Distance: 16
- Frequency control: Synthesizer (PLL)
- Frequency Drift: < 1ppm @ -25°C ~ 75°C
- Frequency Deviation: < 1ppm @ 25°C
- Spurious Emission: > 60dBc
- Transmitting Power: 0.3 – 1.8mW
- Emission: F1D
- Antenna Impedance: 50 Ohms
- Enclosure: IP-66
- Source Voltage: 100–240VAC @ 50/60Hz
- Power Consumption: 8W
- Operating Temperature: -25°C ~ 75°C
- Dimension: 417mm x 199mm x 167mm
- Weight: 8,800g

**Industrial Radio Remote Control System**
**Twister 2X**

QUALITY YOU CAN COUNT ON!

Distributed by:
The Twister 2X is a highly sophisticated industrial radio remote control system. The versatile features of Twister 2X permit its usage in a wide range of industrial applications. The system can be used to control all types of industrial cranes, tower cranes, building construction equipment, automatic control systems, mining equipment, and many others...

The Twister 2X incorporates numerous advanced safety features and software programming that will ensure maximum security and safety in the work place.

Advanced Software Programming
The system is equipped with highly evolved software that has redundant error checking and correcting capabilities to ensure 100% error-free transmission, decoding and control of all output relays. This highly evolved software includes CRC (Cyclical Redundancy Check) and Hamming Codes (Error Recovery).

Advanced Encoding System
The encoding system utilizes advanced microprocessor control for 100% error-free data transmission. The availability of 65,536 sets of unique security ID codes will ensure that only commands from a matching control transmitter can be carried out without any interference from other radio systems.

Advanced Decoding System
The decoding system utilizes dual-microprocessor control, which will ensure 100% error-free calculation, bit checking and correction of all incoming data.

Central Microprocessor
A unique central microprocessor is used for data comparison and cross-checking among the two decoding microprocessors. When faults are detected via this central microprocessor, for maximum safety, the entire system will be shut down immediately to avoid possibility of any accidents occurring.

PLL Transmission
The system utilizes advanced PLL synthesized RF transmission. It allows the user to select from a wide range of RF channels best suited for the environment. The RF channel is selected via simple dip-switch settings inside the transmitter unit. The RF channel for the receiver is selected via simple button setting on the receiver LCD control panel. The receiver also has the ability to auto-scan from a wide range of RF channels. The receiver will search and locked on to the intended matching control transmitter.

Full Compliance
The Twister 2X is designed and manufactured in accordance with FCC Part-15 Rules, European Directives (CE/EC), Industry Canada specifications (IC) and RO 9001 guidelines. No site license is required.

System Self-Diagnosing Functions
The Twister 2X is equipped with numerous self-diagnosing functions, which include transmitter low-voltage detection, faulty pushbutton and joystick detection, faulty MAIN contact relay detection, faulty relay card detection, faulty EEPROM detection, faulty RF module detection, and many others...

Programmable Pushbutton Functions
Numerous pushbutton functions can be programmed via an in-house designed programmer unit.

Durable and Lightweight Joysticks
The in-house designed mini joysticks are made from variety of composite materials, which include metal, stainless steel, zinc alloy, magnesium alloy and aluminum alloy. The combination of these materials make the joysticks extremely durable, reliable and ultra lightweight.

Photo-Interrupter Sensors
The system incorporates advanced photo-interrupter sensors for the joystick contacts. These photo-interrupter sensors are extremely reliable and durable, which last many times longer than the conventional brush or collet-type contacts.

BUS Structured Receiver
The BUS structured receiver unit with removable flex cards provides easy service maintenance and inventory of spare parts.

Intelligent Charger
All systems are equipped with a single-slot battery charger with voltage, temperature and overcharging protection. The charger is also equipped with discharging/auto-charge function to prevent any battery memory buildup.