

## 4 Models Available

Alpha 3000F2	(6) two-speed pushbuttons + (1) START/AUX pushbutton
Alpha 3000D2	(10) two-speed pushbuttons + (1) START/AUX pushbutton
Alpha 3000F3	(6) three-speed pushbuttons + (1) START/AUX pushbutton
Alpha 3000D3	(10) three-speed pushbuttons + (1) START/AUX pushbutton



## Alpha 3000 Specifications

Transmitter		Receiver Unit	
Frequency Range	301 & 433MHz	Frequency Range	301 & 433MHz
Transmitting Range	250~300 feet	Demodulation	Narrow Band FM
Hamming Distance	≥6	Frequency Control	Synthesizer (PLL)
Channel Spacing	25KHz	Frequency Drift	< 5ppm @ -13°F ~ 158°F
Frequency Control	Quartz Crystals	Frequency Deviation	< 1ppm @ 77°F
Spurious Emission	-50dB	Sensitivity	-122dBm
Transmitting Power	0.3mW	Antenna Impedance	50ohms
Antenna Impedance	50 ohms	Data Decoder Reference	Quartz Crystals
Enclosure	IP-66	Responding Time	64~100mS
Source Voltage	DC 6.0V	Enclosure	IP-66
Current Drain	~8mA @ 6V	Source Voltage	AC 120V/220V/380V/415V @ 50/60 Hz.
Operating Temp.	-13°F ~ 158°F	Power Consumption	11VA
Dimension : Alpha 3000F	9.0 x 3.0 x 1.85 (inch)	Operating Temp.	-13°F ~ 158°F
Alpha 3000D	11.5 x 3.0 x 1.85 (inch)	Output Contact Rating	250V @ 10A
Weight : Alpha 3000F	21oz (include batteries)	Dimension (All Models)	16.7 x 9.6 x 5.1 (inch)
Alpha 3000D	25oz (include batteries)	Weight (All Models)	17.7lb

Distributed by:

# 2 & 3-Speed ALPHA 3000 SERIES Industrial Radio Remote Control Systems

*Industry's Best 2 & 3-Speed Pushbuttons  
Advanced "RISC" microprocessors  
Advanced System Software  
Metal Receiver Enclosure  
100% Water-Resistant  
Ultra Power Saving  
Durable & Rugged  
Reliable & Safe*



# Unparalleled Performance!



## Advanced System Software

The Alpha 3000 series utilizes advanced RISC microprocessor control with highly evolved system software that has redundant error checking and correcting capabilities to ensure 100% error-free encoding, transmitting, receiving, decoding and control of all output relays. This highly evolved system software includes CRC (Cyclical Redundancy Check) and Hamming Code (Error Recovery).

## Safe and Reliable Operation

To ensure maximum operating safety the system incorporates numerous important safety features, which include transmitter pushbutton fault-detection ►► visual warning ►► auto-shutoff, transmitter low-voltage detection ►► visual warning ►► auto-shutoff, receiver fault-detection ►► auto-shutoff, and receiver MAIN relay auto-disconnect when the system is in sleep mode or when transmitter low-voltage condition is detected.

## Secure Operation

Both transmitter and receiver utilize advanced 16+1 bit microprocessor control. The availability of 65,536 sets of unique ID code + 30 distinct RF channels ensure that only commands from a matching control transmitter can be carried out, reducing the risk of interference from outside sources.

## Safety MAIN Relay Circuits

For added safety the receiver system utilizes a special "Safety Relay" for the MAIN relay circuits. If the receiver MAIN relay is defective (example: fails to open or close during operation or not responding to a "Stop" command) a fault will be detected and the system will be shut down immediately to avoid possibility of any accidents occurring.



## Ultra Power Saving Circuits

The transmitter utilizes advanced power-saving circuits providing more than 250 hours of continuous operation between battery replacements using just four (4) off-the-shelf "AA" alkaline batteries. The extremely long battery life eliminates the need for frequent replacing and recharging of batteries.



## Industry's Best 2 & 3-speed Pushbuttons

Custom in-house designed 2 and 3-speed pushbuttons are extremely durable and reliable for a minimum of one million press cycles. Unlike most 2 and 3-speed pushbuttons available from other radio control manufacturers, these pushbuttons are easily manipulated even when the operator is wearing gloves. The snap-action steps provide positive tactile feedback to the operator.

## 30 User-Selectable RF Channels

The receiver is equipped with PLL (Phase Lock Loop) synthesized RF module with 30 sets of user-selectable RF channels (narrow band FM) adjusted via simple dip-switch settings.

## Durable and Rugged Transmitter

The transmitter enclosures are constructed from industrial strength composite materials (Nylon + Fiberglass) that resist cracking and deformation commonly occurred from frequent drops and long term exposure to heat, sunlight and harsh environments.



## 100% Sealed Enclosure

Both transmitter and receiver enclosures are fully sealed and impervious to dust, water, oil, grease, acids, alkaline, heat and sunlight, which provide trouble-free operation in high moisture environments and outdoor applications. The receiver enclosures are fully painted inside and out with stainless steel hinges and key lock.

## Modular Receiver

The modular design of the receiver provides easy service maintenance of all internal components. The RF module, decoding module, upper/lower relay boards and power transformer are all placed independently inside the metal enclosure.

## Full Compliance

The Alpha 3000 series are designed and manufactured in accordance with FCC Part-15 Rules, European Directives (CE/CB), Industry Canada specifications (IC) and ISO 9001 guidelines. No site license is required.



# 2 & 3-Speed ALPHA 3000 SERIES Industrial Radio Remote Control Systems

*Industry's Best 2 & 3-Speed Pushbuttons  
Advanced "RISC" microprocessors  
Advanced System Software  
Metal Receiver Enclosure  
100% Water-Resistant  
Ultra Power Saving  
Durable & Rugged  
Reliable & Safe*

## 4 Models Available

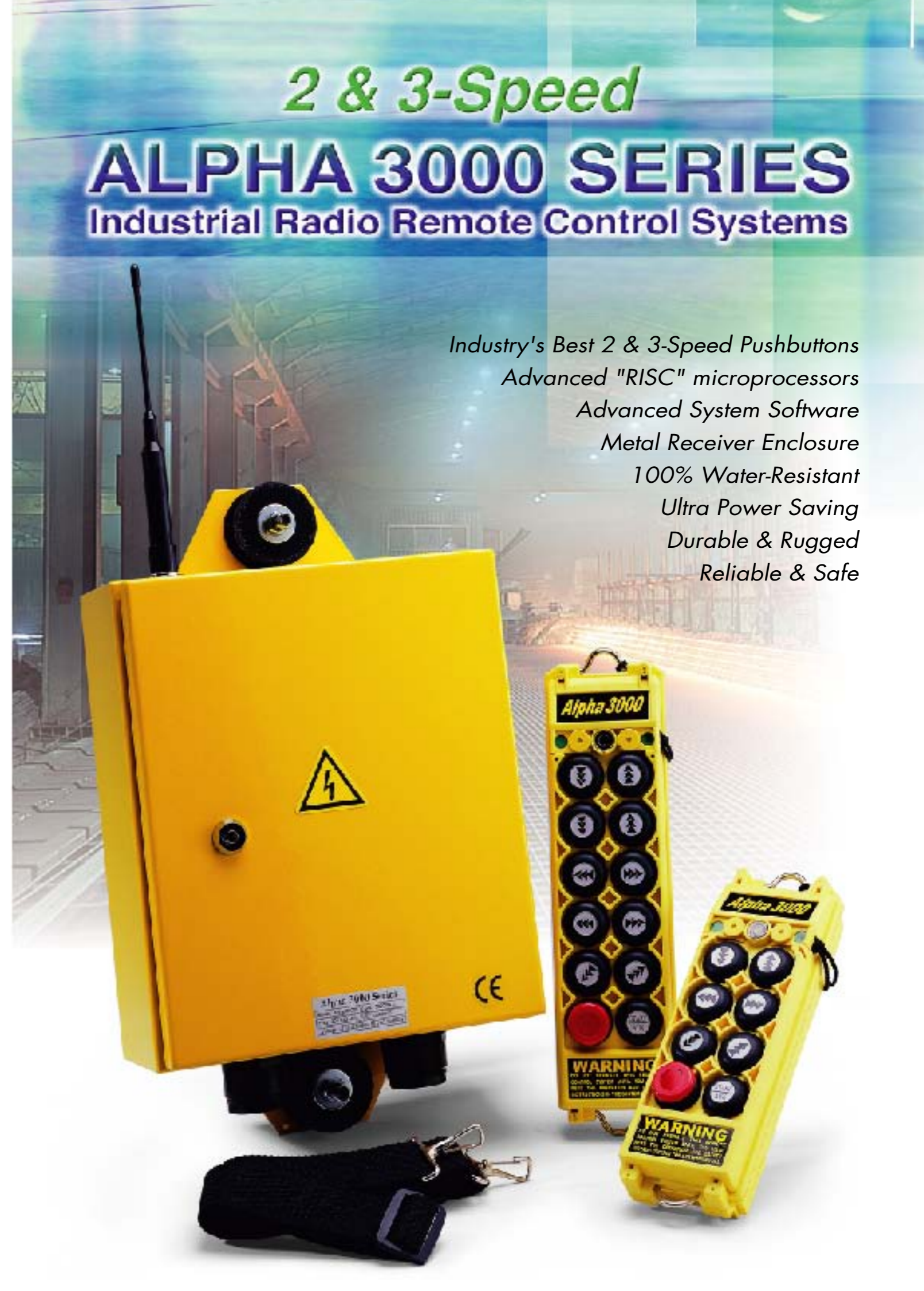
Alpha 3000F2	(6) two-speed pushbuttons + (1) one-speed AUX pushbutton
Alpha 3000D2	(10) two-speed pushbuttons + (1) one-speed AUX pushbutton
Alpha 3000F3	(6) three-speed pushbuttons + (1) one-speed AUX pushbutton
Alpha 3000D3	(10) three-speed pushbuttons + (1) one-speed AUX pushbutton



## Alpha 3000 Specifications

Transmitter		Receiver Unit	
Frequency Range	433MHz	Frequency Range	433MHz
Transmitting Range	100 meters	Demodulation	Narrow Band FM
Hamming Distance	≥6	Frequency Control	Synthesizer (PLL)
Channel Spacing	25KHz	Frequency Drift	< 5ppm @ -25°C ~ 75°C
Frequency Control	Quartz Crystals	Frequency Deviation	< 1ppm @ 25°C
Spurious Emission	-50dB	Sensitivity	-122dBm
Transmitting Power	1.0mW	Antenna Impedance	50ohms
Antenna Impedance	50 ohms	Data Decoder Reference	Quartz Crystals
Enclosure	IP-66	Responding Time	64~100mS
Source Voltage	DC 6.0V	Enclosure	IP-66
Current Drain	~8mA @ 6V	Source Voltage	AC 120V/220V/380V/415V @ 50/60 Hz.
Operating Temp.	-25°C ~ 75°C	Power Consumption	11VA
Dimension : Alpha 3000F	230 x 78 x 47 (mm)	Operating Temp.	-25°C ~ 75°C
Alpha 3000D	292 x 78 x 47 (mm)	Output Contact Rating	250V @ 10A
Weight : Alpha 3000F	600g (include batteries)	Dimension (All Models)	425 x 245 x 130 (mm)
Alpha 3000D	730g (include batteries)	Weight (All Models)	8.0kg

Distributed by:



# Unparalleled Performance!



## Advanced System Software

The Alpha 3000 series utilizes advanced RISC microprocessor control with highly evolved system software that has redundant error checking and correcting capabilities to ensure 100% error-free encoding, transmitting, receiving, decoding and control of all output relays. This highly evolved system software includes CRC (Cyclical Redundancy Check) and Hamming Code (Error Recovery).

## Safe and Reliable Operation

To ensure maximum operating safety the system incorporates numerous important safety features, which include transmitter pushbutton fault-detection ► visual warning ► auto-shutoff, transmitter low-voltage detection ► visual warning ► auto-shutoff, receiver fault-detection ► auto-shutoff, and receiver MAIN relay auto-disconnect when the system is in sleep mode, radio interference, system out of receiving range, and when transmitter low-voltage condition is detected.

## Secure Operation

Both transmitter and receiver utilize advanced 16+1 bit microprocessor control. The availability of 65,536 sets of unique ID code + 20 distinct RF channels ensure that only commands from a matching control transmitter can be carried out, reducing the risk of interference from outside sources.

## Safety MAIN Relay Circuits

For added safety the receiver system utilizes a special "Safety Relay" for the MAIN relay circuits. If the receiver MAIN relay is defective (example: fails to open or close during operation or not responding to a "Stop" command) a fault will be detected and the system will be shut down immediately to avoid possibility of any accidents occurring.



## Ultra Power Saving Circuits

The transmitter utilizes advanced power-saving circuits providing more than 250 hours of continuous operation between battery replacements using just four (4) off-the-shelf "AA" alkaline batteries. The extremely long battery life eliminates the need for frequent replacing and recharging of batteries.



## Industry's Best 2 & 3-speed Pushbuttons

Custom in-house designed 2 and 3-speed pushbuttons are extremely durable and reliable for a minimum of one million press cycles. Unlike most 2 and 3-speed pushbuttons available from other radio control manufacturers, these pushbuttons are easily manipulated even when the operator is wearing gloves. The snap-action steps provide positive tactile feedback to the operator.

## 20 User-Selectable RF Channels

The receiver is equipped with PLL (Phase Lock Loop) synthesized RF module with 20 sets of user-selectable RF channels (narrow band FM) adjusted via simple dip-switch settings.

## Durable and Rugged Transmitter

The transmitter enclosures are constructed from industrial strength composite materials (Nylon + Fiberglass) that resist cracking and deformation commonly occurred from frequent drops and long term exposure to heat, sunlight and harsh environments.



## 100% Sealed Enclosure

Both transmitter and receiver enclosures are fully sealed and impervious to dust, water, oil, grease, acids, alkaline, heat and sunlight, which provide trouble-free operation in high moisture environments and outdoor applications. The receiver enclosures are fully painted inside and out with stainless steel hinges and key lock.

## Modular Receiver

The modular design of the receiver provides easy service maintenance of all internal components. The RF module, decoding module, upper/lower relay boards and power transformer are all placed independently inside the metal enclosure.

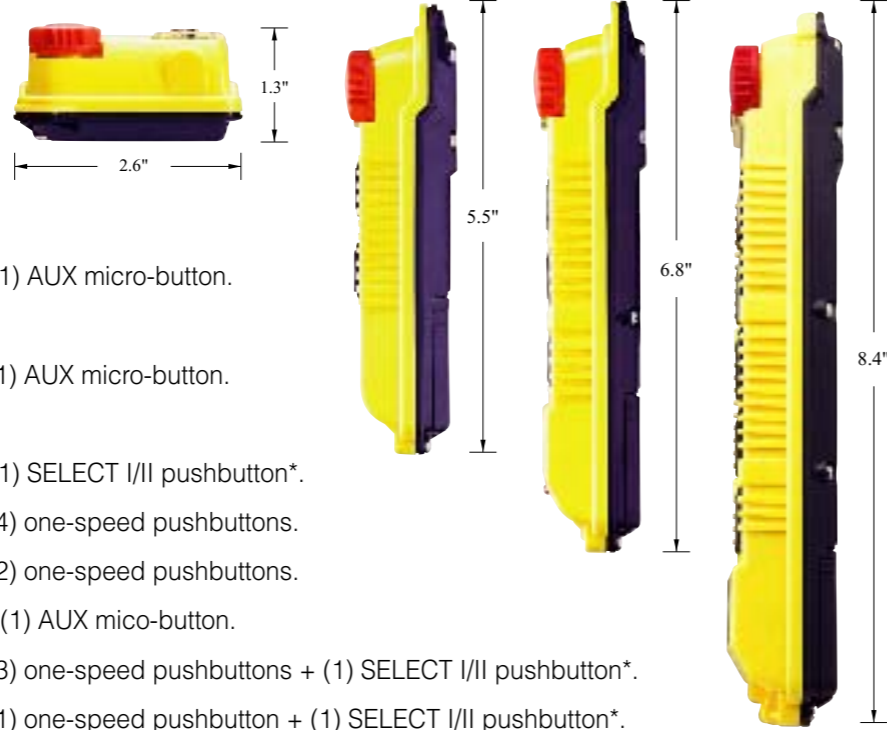
## Full Compliance

The Alpha 3000 series are designed and manufactured in accordance with FCC Part-15 Rules, European Directives (CE/CB), Industry Canada specifications (IC) and ISO 9001 guidelines. No site license is required.



## 13 MODELS

Alpha 500	(4) one-speed pushbuttons.
Alpha 520	(4) two-speed pushbuttons.
Alpha 540S	(6) one-speed pushbuttons.
Alpha 540A	(6) one-speed pushbuttons + (1) AUX micro-button.
Alpha 560S	(6) two-speed pushbuttons.
Alpha 560A	(6) two-speed pushbuttons + (1) AUX micro-button.
Alpha 580A	(10) one-speed pushbuttons.
Alpha 580B	(9) one-speed pushbuttons + (1) SELECT I/II pushbutton*.
Alpha 580C-1	(6) two-speed pushbuttons + (4) one-speed pushbuttons.
Alpha 580C-2	(8) two-speed pushbuttons + (2) one-speed pushbuttons.
Alpha 580D	(10) two-speed pushbuttons + (1) AUX micro-button.
Alpha 580E	(6) two-speed pushbuttons + (3) one-speed pushbuttons + (1) SELECT I/II pushbutton*.
Alpha 580F	(8) two-speed pushbuttons + (1) one-speed pushbutton + (1) SELECT I/II pushbutton*.



\* For crane systems with auxiliary hoist and trolley changeover function (5~6 motions)

## ALPHA 500 SPECIFICATIONS

TRANSMITTER		RECEIVER	
Frequency Range	301 & 433 MHz	Modulation	Narrow Band FM
Channel Spacing	25KHz	Decoding Reference	Quartz Crystal
Transmitting Range	250~300 Feet	Frequency Control	Synthesizer (PLL)
Hamming Distance	6	Sensitivity	-120dBm
Frequency Control	Quartz Crystal	Responding Time	40mS
Transmitting Power	0.3mW	Output Contact	250V @ 10A
Enclosure Rating	IP-66	Enclosure Rating	IP-65 / IP-66
Source Voltage	3.0V ("AA" x 2)	Source Voltage	AC 24V ~ 440V available
Current Drain	10~18mA	Power Consumption	11VA
Operating Temperature	-13°F ~ +158°F	Operating Temperature	-13°F ~ +158°F
Dimension (500~520)	5.5 x 2.6 x 1.3 (inch)	Dimension (500~520)	12.2 x 5.3 x 2.8 (inch)
(540~560)	6.8 x 2.6 x 1.3 (inch)	(540~560)	12.2 x 5.3 x 2.8 (inch)
(580)	8.4 x 2.6 x 1.3 (inch)	(580)	11.8 x 9.0 x 3.4 (inch)
Weight (500~520)	7.0oz (with batteries)	Weight (500~520)	3.6lb (with output cable)
(540~560)	8.5oz (with batteries)	(540~560)	4.0lb (with output cable)
(580)	10oz (with batteries)	(580)	7.5lb (no output cable)

Distributed by:

# Alpha 500 Series

## INDUSTRIAL RADIO REMOTE CONTROL SYSTEMS



Low Cost  
Reliable & Safe  
Durable & Rugged  
Ultra Power Saving  
100% Water-resistant  
Compact & Lightweight



# Designed with Safety in Mind



## Advanced System Software

The Alpha 500 series utilizes advanced microprocessor control with highly evolved system software that has redundant error checking and correcting capabilities to ensure 100% error-free encoding, transmitting, receiving, decoding and controlling of all output relays. This highly evolved system software includes CRC (Cyclical Redundancy Check) and Hamming Codes (Error Recovery).

## Safe and Reliable Operation

To ensure maximum operating safety the system incorporates numerous important safety features, which include transmitter pushbutton fault-detection ► visual warning ► auto-shutoff, transmitter low-voltage detection ► visual warning ► auto-shutoff, receiver fault-detection ► auto-shutoff, and receiver MAIN relay auto-disconnect when the system is in sleep mode or when transmitter low-voltage condition is detected.

## Secure Operation

Both transmitter and receiver utilize advanced microprocessor control. The availability of 32,768 sets of unique ID codes + 30 distinct RF channels ensure that only commands from a matching control transmitter can be carried out, reducing the risk of interference from outside sources.

## Safety MAIN Relay Circuits

For added safety the receiver system utilizes a special "Safety Relay" for the receiver MAIN relay circuits. If the receiver MAIN relay is defective (example: fails to open or close during operation or not responding to a "Stop" command) a fault will be detected and the system will be shut down immediately to avoid possibility of any accidents occurring.

## Power Saving Circuits

The transmitter utilizes advance power-saving circuits providing more than 150 hours of continuous operation between battery replacements using just two (2) off-the-shelf "AA" alkaline batteries. The extremely long battery life eliminates the need for frequent replacing or recharging of batteries.



## 30 User-Selectable RF Channels

The receiver is equipped with a PLL (Phase Lock Loop) synthesized RF module with 30 sets of user-selectable RF channels (narrow band FM) adjusted via simple dip-switch settings. The transmitter is equipped with a unique removable transmitting RF board for easy replacement of transmitting RF channels.

## Lightweight and Compact

The keypad arrangement results in a transmitter that is ultra lightweight and compact in design. Including batteries, the transmitter handset is weighted at only 7oz for the 4-button models, 8.5oz for the 6-button models, and 10oz for the 10-button models. This optimized design is almost 50% smaller and lighter than most competitive models and much easier to carry and operate.

## Waterproof and Durable

The transmitter and receiver enclosures are constructed from high-grade composite materials that resist cracking and deformation commonly occurred from frequent drops and long term exposure to heat, sunlight and harsh environments. The enclosures are fully sealed and impervious to dust, water, oil, acids, alkaline, heat and sunlight, which provide trouble-free operation in high moisture environments and outdoor applications.

## Industry's Best 2-speed Pushbutton

Custom in-house designed 2-speed pushbuttons are extremely durable and reliable for a minimum of one million press cycles. Unlike most 2-speed pushbuttons available from other radio control manufacturers, these pushbuttons are easily manipulated even when the operator is wearing gloves. The snap-action steps provided positive tactile feedback to the operator.

## Full Compliance

The Alpha 500 series are designed and manufactured in accordance with FCC Part 15 Rules, European Directives (CE/CB), Industry Canada specifications (IC) and ISO 9001 guidelines. No site license is required.



## 4 Models Available

Alpha 3000F2	(6) two-speed pushbuttons + (1) START/AUX pushbutton
Alpha 3000D2	(10) two-speed pushbuttons + (1) START/AUX pushbutton
Alpha 3000F3	(6) three-speed pushbuttons + (1) START/AUX pushbutton
Alpha 3000D3	(10) three-speed pushbuttons + (1) START/AUX pushbutton



## Alpha 3000 Specifications

Transmitter		Receiver Unit	
Frequency Range	301 & 433MHz	Frequency Range	301 & 433MHz
Transmitting Range	250~300 feet	Demodulation	Narrow Band FM
Hamming Distance	≥6	Frequency Control	Synthesizer (PLL)
Channel Spacing	25KHz	Frequency Drift	< 5ppm @ -13°F ~ 158°F
Frequency Control	Quartz Crystals	Frequency Deviation	< 1ppm @ 77°F
Spurious Emission	-50dB	Sensitivity	-122dBm
Transmitting Power	0.3mW	Antenna Impedance	50ohms
Antenna Impedance	50 ohms	Data Decoder Reference	Quartz Crystals
Enclosure	IP-66	Responding Time	64~100mS
Source Voltage	DC 6.0V	Enclosure	IP-66
Current Drain	~8mA @ 6V	Source Voltage	AC 120V/220V/380V/415V @ 50/60 Hz.
Operating Temp.	-13°F ~ 158°F	Power Consumption	11VA
Dimension : Alpha 3000F	9.0 x 3.0 x 1.85 (inch)	Operating Temp.	-13°F ~ 158°F
Alpha 3000D	11.5 x 3.0 x 1.85 (inch)	Output Contact Rating	250V @ 10A
Weight : Alpha 3000F	21oz (include batteries)	Dimension (All Models)	16.7 x 9.6 x 5.1 (inch)
Alpha 3000D	25oz (include batteries)	Weight (All Models)	17.7lb

Distributed by:

# 2 & 3-Speed ALPHA 3000 SERIES Industrial Radio Remote Control Systems

*Industry's Best 2 & 3-Speed Pushbuttons  
Advanced "RISC" microprocessors  
Advanced System Software  
Metal Receiver Enclosure  
100% Water-Resistant  
Ultra Power Saving  
Durable & Rugged  
Reliable & Safe*



# Unparalleled Performance!



## Advanced System Software

The Alpha 3000 series utilizes advanced RISC microprocessor control with highly evolved system software that has redundant error checking and correcting capabilities to ensure 100% error-free encoding, transmitting, receiving, decoding and control of all output relays. This highly evolved system software includes CRC (Cyclical Redundancy Check) and Hamming Code (Error Recovery).

## Safe and Reliable Operation

To ensure maximum operating safety the system incorporates numerous important safety features, which include transmitter pushbutton fault-detection ►► visual warning ►► auto-shutoff, transmitter low-voltage detection ►► visual warning ►► auto-shutoff, receiver fault-detection ►► auto-shutoff, and receiver MAIN relay auto-disconnect when the system is in sleep mode or when transmitter low-voltage condition is detected.

## Secure Operation

Both transmitter and receiver utilize advanced 16+1 bit microprocessor control. The availability of 65,536 sets of unique ID code + 30 distinct RF channels ensure that only commands from a matching control transmitter can be carried out, reducing the risk of interference from outside sources.

## Safety MAIN Relay Circuits

For added safety the receiver system utilizes a special "Safety Relay" for the MAIN relay circuits. If the receiver MAIN relay is defective (example: fails to open or close during operation or not responding to a "Stop" command) a fault will be detected and the system will be shut down immediately to avoid possibility of any accidents occurring.



## Ultra Power Saving Circuits

The transmitter utilizes advanced power-saving circuits providing more than 250 hours of continuous operation between battery replacements using just four (4) off-the-shelf "AA" alkaline batteries. The extremely long battery life eliminates the need for frequent replacing and recharging of batteries.



## Industry's Best 2 & 3-speed Pushbuttons

Custom in-house designed 2 and 3-speed pushbuttons are extremely durable and reliable for a minimum of one million press cycles. Unlike most 2 and 3-speed pushbuttons available from other radio control manufacturers, these pushbuttons are easily manipulated even when the operator is wearing gloves. The snap-action steps provide positive tactile feedback to the operator.

## 30 User-Selectable RF Channels

The receiver is equipped with PLL (Phase Lock Loop) synthesized RF module with 30 sets of user-selectable RF channels (narrow band FM) adjusted via simple dip-switch settings.

## Durable and Rugged Transmitter

The transmitter enclosures are constructed from industrial strength composite materials (Nylon + Fiberglass) that resist cracking and deformation commonly occurred from frequent drops and long term exposure to heat, sunlight and harsh environments.



## 100% Sealed Enclosure

Both transmitter and receiver enclosures are fully sealed and impervious to dust, water, oil, grease, acids, alkaline, heat and sunlight, which provide trouble-free operation in high moisture environments and outdoor applications. The receiver enclosures are fully painted inside and out with stainless steel hinges and key lock.

## Modular Receiver

The modular design of the receiver provides easy service maintenance of all internal components. The RF module, decoding module, upper/lower relay boards and power transformer are all placed independently inside the metal enclosure.

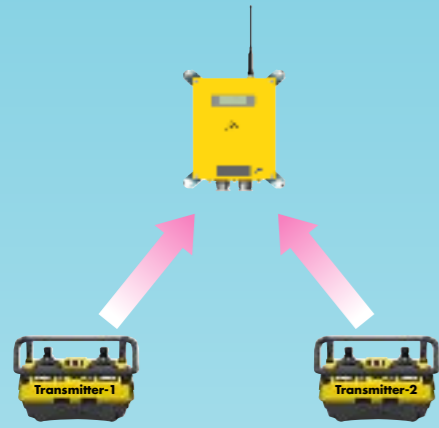
## Full Compliance

The Alpha 3000 series are designed and manufactured in accordance with FCC Part-15 Rules, European Directives (CE/CB), Industry Canada specifications (IC) and ISO 9001 guidelines. No site license is required.



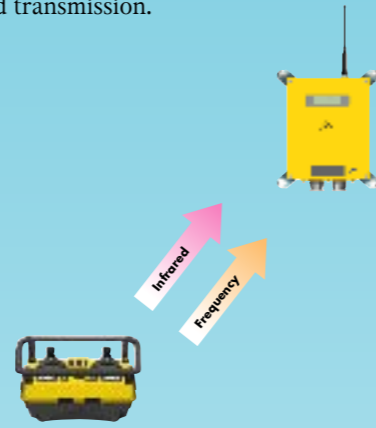
### Pitch & Catch Feature

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



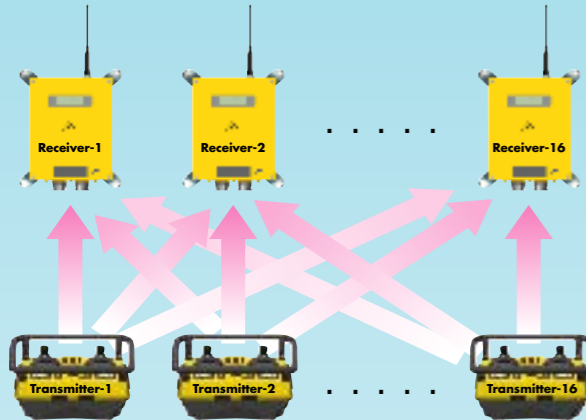
### Infrared Initial Startup Feature

This feature restricts initial system activation beyond 20~30 meters from the crane or receiver unit by means of infrared transmission.



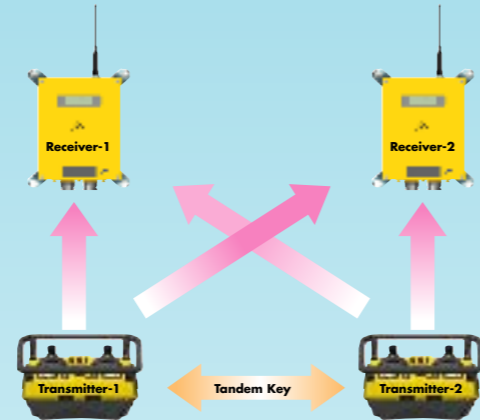
### Random Access Feature

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



### 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).



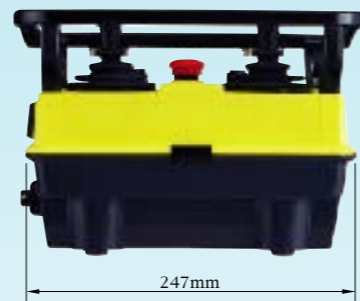
## System Specifications

#### TRANSMITTER

Frequency Range: PLL 433 MHz.  
 Transmitting Range: 100 Meters / 300 Feet  
 Continuous Operation: 16+ Hours (600mA)  
 ID Code: 65,536 Sets  
 Channel Spacing: 25KHz.  
 Hamming Distance:  $\geq 6$   
 Frequency control: Synthesizer (PLL)  
 Frequency Drift:  $< 3\text{ppm}$  @  $-25^{\circ}\text{C} \sim 75^{\circ}\text{C}$   
 Frequency Deviation:  $< 1\text{ppm}$  @  $25^{\circ}\text{C}$   
 Spurious Emission:  $> 60\text{dBc}$   
 Transmitting Power: 0.3 ~ 1.0mW  
 Emission: F1D  
 Antenna Impedance: 50 Ohms  
 Enclosure: IP-66  
 Source Voltage: 7.2V (600mA or 1400mA)  
 Current Drain: ~80mA  
 Operating Temperature:  $-25^{\circ}\text{C} \sim 75^{\circ}\text{C}$   
 Dimension: 247mm x 154mm x 182mm  
 Weight: 1,600g (include battery pack)

#### RECEIVER

Frequency Range: PLL 433 MHz.  
 Sensitivity: -125dBm  
 Decoding Reference: FSK  
 ID Code: 65,536 Sets  
 Channel Spacing: 25KHz.  
 Hamming Distance:  $\geq 6$   
 Frequency control: Synthesizer (PLL)  
 Frequency Drift:  $< 3\text{ppm}$  @  $-25^{\circ}\text{C} \sim 75^{\circ}\text{C}$   
 Frequency Deviation:  $< 1\text{ppm}$  @  $25^{\circ}\text{C}$   
 Decoding Reference: Quartz Crystals  
 Responding Time: 100mS ~ 300mS  
 Output Contact: 250V @10A  
 Antenna Impedance: 50 Ohms  
 Enclosure: IP-66  
 Source Voltage: 100~240VAC @ 50/60Hz.  
 Power Consumption: 36VA  
 Operating Temperature:  $-25^{\circ}\text{C} \sim 75^{\circ}\text{C}$   
 Dimension: 417mm X 309mm X 167mm  
 Weight: 8,800g



# Twister 2X

## Industrial Radio Remote Control System



Distributed by :

QUALITY YOU CAN COUNT ON !



# Twister 2X



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/CB), Industry Canada specifications (IC) and ISO 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 coil-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-charging function to prevent any battery memory buildup.

