### 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 Series Specifications

			17)	
Transmitter			Receiver Unit	
Frequency Range		301 & 433 MHz	Frequency Range	301 & 433 MHz
Transmitting Range		100 meters (300 feet)	Demodulation	Narrow Band FM
Hamming Distance		≧6	Frequency Control	Synthesizer(PLL)
Channel Spacing		25KHz	Frequency Drift	< 5ppm@-25°C ~ +75°C (-13°F~ 158°F)
Frequency Control		Synthesizer (PLL)	Frequency Deviation	< 1ppm@ 25°C (77°F)
Spurious Emission		- 50dB	Sensitivity	- 122dBm
Transmitting Power		1.0mW	Antenna Impedance	50 ohms
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		~ 15mA @ 6V	Source Voltage	AC 120V/220V/380V/415V @ 50/60 Hz.
Operating Temp.		-10 °C~ +70°C (+14°F~+158°F)	Power Consumption	11VA
Dimension : Alpha 3000F		230 x 78 x 47 (mm) 9.0 x 3.0 x 1.85 (inch)	Operating Temp.	-10 °C~ +70°C (+14°F~+158°F)
	Alpha 3000D	292 x 78 x 47 (mm) 11.5 x 3.0 x 1.85 (inch)	Output Contact Rating	250V @ 10A
Weight:	Alpha 3000F	600g (include batteries) 21oz (include batteries)	Dimension (All Models)	425 x 245 x 130 (mm) 16.7 x 9.6 x 5.1 (inch)
	Alpha 3000D	730g (include batteries)	Weight (All Models)	8.0kgs

Distributed by:



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# 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  $\rightarrow$  visual warning  $\rightarrow$  auto-shutoff, transmitter low-voltage detection  $\rightarrow$  visual warning  $\rightarrow$  auto-shutoff, receiver fault-detection  $\rightarrow$  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 + 63 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 120 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 snapaction steps provide positive tactile feedback to the operator.

#### 30 User-Selectable RF Channels

The receiver and transmitter are 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.



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.



