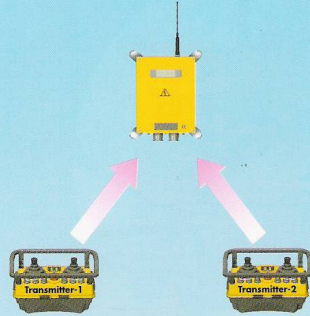


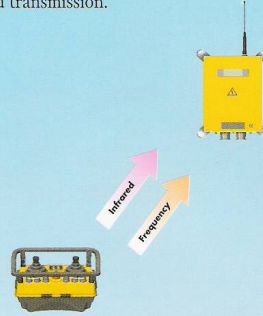
Pitch & Catch Feature

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



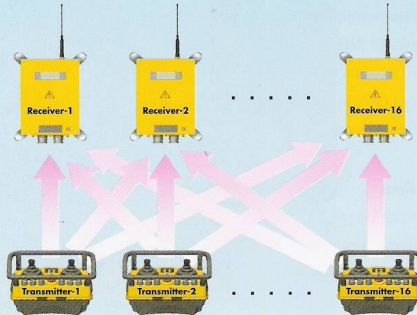
Infrared Initial Startup Feature

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



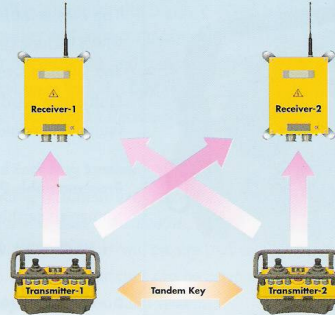
Random Access Feature

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).



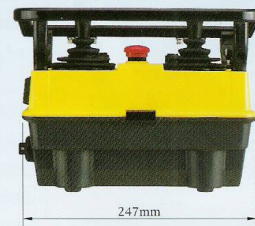
System Specifications

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: ≥ 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°C
 Spurious Emission: $> 60\text{dBc}$
 Transmitting Power: $0.3 \sim 1.0\text{mW}$
 Emission: F1D
 Antenna Impedance: 50 Ohms
 Enclosure: IP-66
 Source Voltage: 7.2V (600mA or 1400mA)
 Current Drain: $\sim 80\text{mA}$
 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: ≥ 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°C
 Decoding Reference: Quartz Crystals
 Responding Time: 100mS \sim 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

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

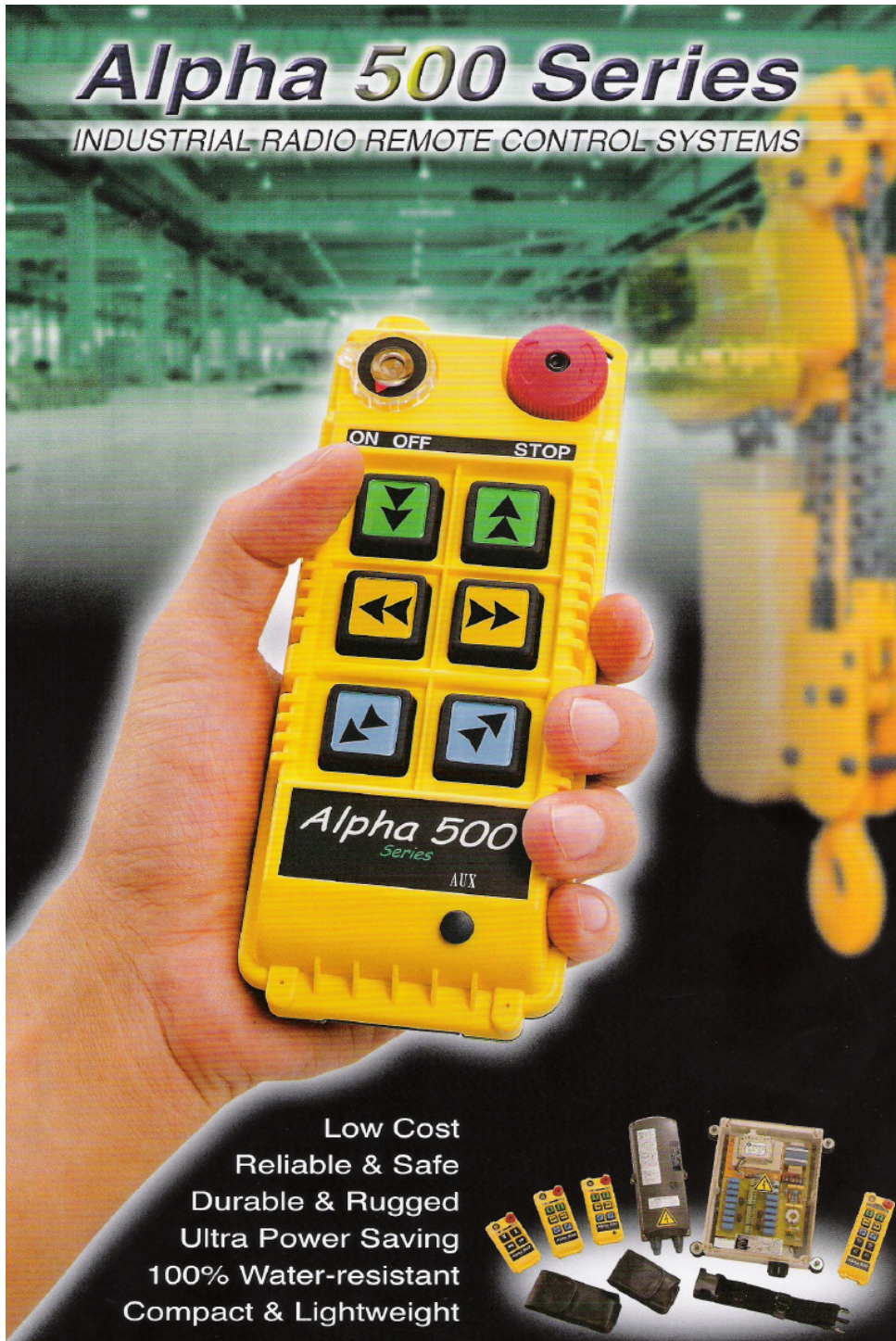
All systems are equipped with a single-slot battery charger with voltage, temperature and overcharging protection. The charger is also equipped with discharging/auto-charging function to prevent any battery memory buildup.






Alpha 500 Series


INDUSTRIAL RADIO REMOTE CONTROL SYSTEMS



ON OFF STOP

Alpha 500
Series
AUX

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



10 MODELS

Alpha 520	(4) two-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 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.	
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	Demodulation	Narrow Band FM
Channel Spacing	25KHz	Decoding Reference	Quartz Crystal
Transmitting Range	100 meters	Frequency Control	Synthesizer (PLL)
Hamming Distance	6	Sensitivity	-120dBm
Frequency Control	Quartz Crystal	Responding Time	40mS
Transmitting Power	1.0mW	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, 12-24VDC available
Current Drain	10~18mA	Power Consumption	11VA
Operating Temperature	-10°C ~ +70°C	Operating Temperature	-10°C ~ +70°C
Dimension (500~520)	140 x 68 x 33 (mm)	Dimension (500~520)	310 x 134 x 72 (mm)
(540~560)	173 x 68 x 33 (mm)	(540~560)	310 x 134 x 72 (mm)
(580)	213 x 68 x 33 (mm)	(580)	300 x 230 x 86 (mm)
Weight (500~520)	200g (with batteries)	Weight (500~520)	1,625g (with output cable)
(540~560)	240g (with batteries)	(540~560)	1,700g (with output cable)
(580)	290g (with batteries)	(580)	3,400g (no output cable)



Design

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, radio interference, system out of receiving range, and 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 + 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 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.

ed with Safety in Mind



20/30 User-Selectable RF Channels

The receiver is equipped with a PLL (Phase Lock Loop) synthesized RF module with 20(301MHz) / 30(433MHz) 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 200g for the 4-button models, 240g for the 6-button models, and 290g 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

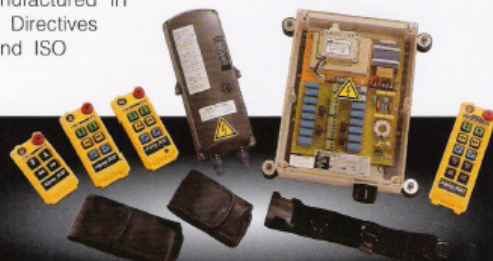
The transmitter and receiver enclosure are constructed from high-grade composite materials that resist cracking and deformation commonly occurred from frequent drops and long term exposure to heat, sunlight and harsh environments. The enclosures are fully sealed and impervious to dust, water, oil, acids, 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.



ALPHA 500 SERIES

Web Site : www.fomotech.com

FOMOTECH
FOMOTECH INTERNATIONAL CORP.

Alpha 600 Series

Industrial Radio Remote Control Systems



15 MODELS

α 604A	(4) single speed pushbuttons
α 604B	(4) double speed pushbuttons
α 607A	(7) single speed pushbuttons
α 607B	(6) double speed pushbuttons + (1) single speed pushbuttons
α 607AT	(6) single speed pushbuttons + (1) SELECT I / II pushbutton*
α 607BT	(6) double speed pushbuttons + (1) SELECT I / II pushbutton*
α 608A	(8) single speed pushbuttons
α 608B	(6) double speed pushbuttons + (2) single speed pushbuttons
α 612A	(12) single speed pushbuttons
α 612B	(11) single speed pushbuttons + (1) SELECT I / II pushbutton*
α 612C-1	(6) double speed pushbuttons + (6) single speed pushbuttons
α 612C-2	(8) double speed pushbuttons + (4) single speed pushbuttons
α 612D	(10) double speed pushbuttons + (2) single speed pushbuttons
α 612E-1	(6) double speed pushbuttons + (5) single speed pushbuttons + (1) SELECT I / II pushbutton*
α 612E-2	(8) double speed pushbuttons + (3) single speed pushbuttons + (1) SELECT I / II pushbutton*

* For crane systems with auxiliary hoist and trolley changeover function (5-8 motions)



SPECIFICATIONS

Transmitter Unit

Frequency Range : 433, 447, 480 MHz
 Transmitting Range : 100 meters
 Hamming Distance : 6
 Channel Spacing : 25KHz
 Frequency Drift : < 5ppm @ -25°C ~ +75°C
 Frequency Deviation : < 1ppm @ 25°C
 Spurious Emission : - 50dB
 Transmitting Power : 0.1Mw ~ 10mW
 Emission : F1D
 Antenna Impedance : 50 ohms
 Enclosure Rating : IP-66
 Source Voltage : Ni-MH AA size battery 2.4V
 Current Drain : 10 ~ 18mA
 Operating Temperature : -10°C ~ +50°C
 Transmitting power consumption :
 < 30mA @ 3.5V (various from encoding mode and transmitting power)
 Operating time :
 consecutive 120hrs @ (batteries full (2500mA), Band 433MHz, transmitting power 1mW)
 Dimension (604 Models) : 140mm x 68mm x 30mm
 (607~608 Models) : 189mm x 68mm x 30mm
 (612 Models) : 235mm x 68mm x 30mm
 Weight (604 Models) : 240g (include batteries)
 (607~608 Models) : 300g (include batteries)
 (612 Models) : 350g (include batteries)

Charger Unit

Dimension : 120mm x 105mm x 105mm
 Voltage : 100-240V 50/60Hz
 Power Consumption : max 7 Watt
 Operating Temperature : 0°C ~ +40°C
 Heat Ventilation : temperature control fan
 Charging Current : about 600mA @ 3V
 Charging Time : about 5hrs @ 2500mA
 Charging Detection : -AV + temperature

Receiver Unit

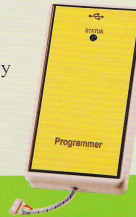
Frequency Range : 433, 447, 480 MHz
 Channel Spacing : 25KHz
 Hamming Distance : 6
 Frequency Control : Synthesizer (PLL)
 Frequency Drift : < 5ppm @ -20°C ~ +70°C
 Frequency Deviation : < 1ppm @ 25°C
 Sensitivity : < -115dBm
 Antenna Impedance : 50ohms
 Data Decoder Reference : Quartz Crystals
 Responding Time : 40ms (Normal)
 Enclosure Rating : IP-66
 Source Voltage : α 604/7/8 DC12-24V • AC48 • 110~240V 50/60Hz
 α 612 AC25-50V • 110~240V • 380-460V 50/60Hz
 Power Consumption : 11VA
 Operating Temperature : -10°C ~ +70°C
 Output Contact Rating : 250V @ 10A
 Dimension (604 Models) : 310mm x 134mm x 72mm
 (607~608 Models) : 310mm x 134mm x 72mm
 (612 Models) : 300mm x 230mm x 86mm
 Weight (604 Models) : 1,625g (include output cable)
 (607~608 Models) : 2,000g (include output cable)
 (612 Models) : 3,400g (include output cable)

Distributed by:

Alpha 600 Series

Visualized Software

This series allows you to set every kind of function combination on software setting display by connecting programmers and radio remote controls via USB interface.



Adjustable PLL RF Module

Both transmitter and receiver are equipped with PLL (Phase Lock Loop) synthesized RF module with 68 sets of user-selectable RF channels (narrow band FM) for the transmitter code transmission.

Alpha 600

FOMOTECH

Complete Auto-Test System

Multi auto-test functions are available, including: receiver and transmitter low voltage test, warning, auto shutdown, pushbutton breakdown test, main relay breakdown test...etc.

Super Power Saving

Receivers MAIN relay is programmed to drop (open) the "Main Line Disconnect Contact" after several minutes of inactivity. The auto shutdown time can be selected on software setting display. The intermittent data transmitting is designed for power saving purpose, so the fully charged batteries can be used for over consecutive 120 hours

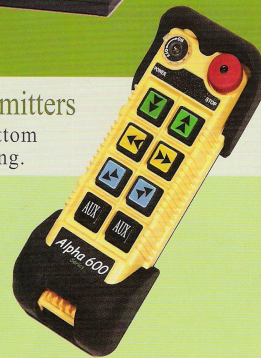
Electromagnetic Induction Charge

The undisclosed metal and sensor type contact of battery charger provides immediate charging simply by placing the transmitter into the charging slot. Opening the battery cover to change the batteries is not needed. With this design, the transmitter waterproof function and structure strength are increased. The transmitter operating life is also prolonged. Available charging source voltage: 100~240VAC.



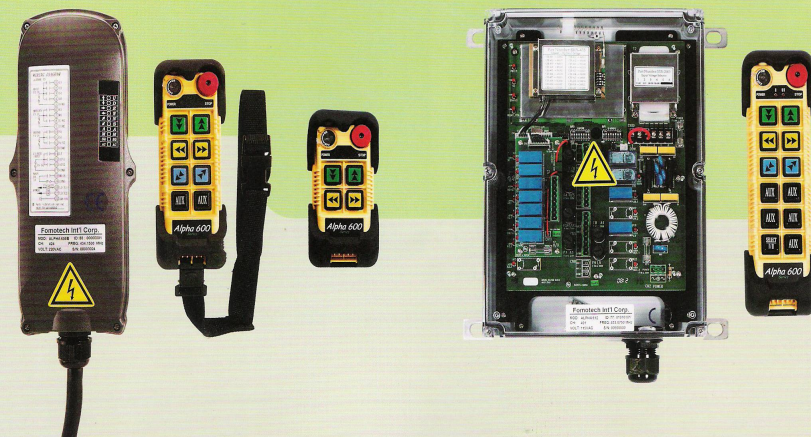
Shock Absorbing Rubbers are available for transmitters

The shock absorbing rubbers on the transmitter top and bottom strengthen the shock absorbing ability and frequent dropping.



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 and water.



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



The image displays the Alpha 3000 Series Industrial Radio Remote Control Systems. On the left is a large, yellow, rectangular metal receiver enclosure with a black antenna on top, a warning symbol (a lightning bolt inside a triangle), and a CE mark. Below the enclosure is a black strap with a metal clip. To the right of the enclosure are two yellow handheld remote controls. The larger one is standing upright, showing a grid of 16 pushbuttons with various symbols (arrows, a lightning bolt, etc.) and a red emergency stop button at the bottom. The smaller one is lying flat, also showing its buttons and a red emergency stop button. Both remotes have a "WARNING" label at the bottom. The background is a blurred industrial setting with metal structures and a bright light source.

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	301 & 433MHz	Frequency Range	301 & 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



Unparalleled

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

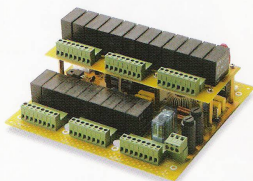
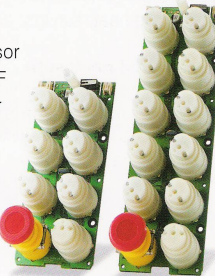
To ensure maximum operating safety the system incorporates numerous important safety features, which include transmitter pushbutton fault-detection → visual warning → auto-shutoff, transmitter low-voltage detection → visual warning → auto-shutoff, receiver fault-detection → auto-shutoff, and receiver 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.



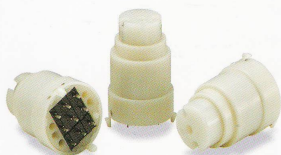
Ultra Power Saving Circuits

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.

FOMOTECH
ISO 9001



ed Performance!



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

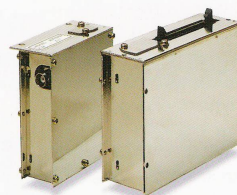
The receiver is equipped with PLL (Phase Lock Loop) synthesized RF module with 20 sets of user-selectable RF channels (narrow band FM) adjusted via simple dip-switch settings.

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.

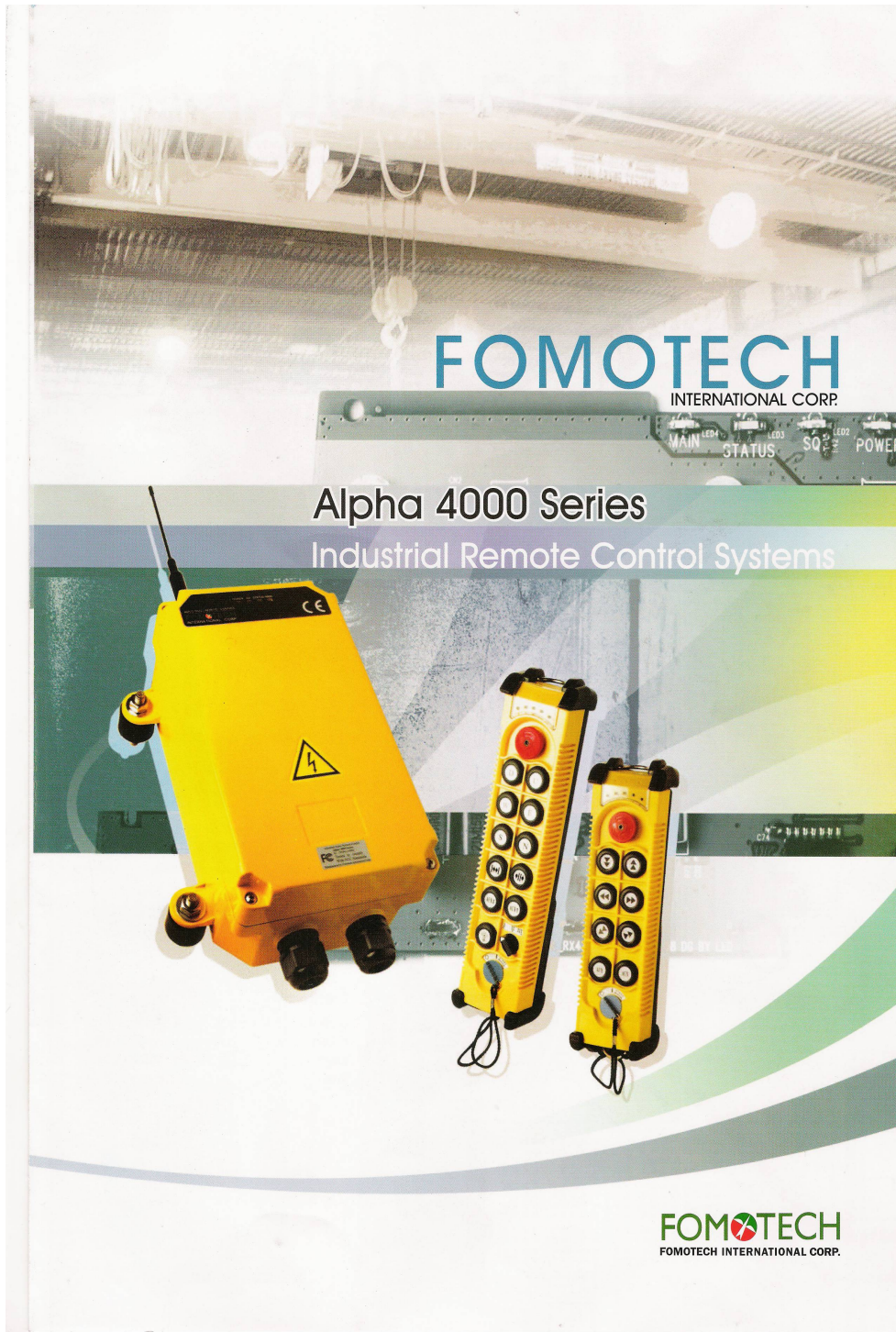
Full Compliance

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.



ALPHA 3000 SERIES

Web Site : www.fomotech.com



12 Models Available

Alpha 4008-1	8 single speed pushbuttons
Alpha 4008-1S	7 single speed pushbuttons + 1 selector switch
Alpha 4008-2	8 double speed pushbuttons
Alpha 4008-3	6 double speed pushbuttons + 2 single speed pushbuttons
Alpha 4008-3S	6 double speed pushbuttons + 1 single speed pushbutton + 1 selector switch
Alpha 4012-1	12 single speed pushbuttons
Alpha 4012-1S	11 single speed pushbuttons + 1 selector switch
Alpha 4012-2	6 double speed pushbuttons + 6 single speed pushbuttons
Alpha 4012-2S	6 double speed pushbuttons + 5 single speed pushbuttons + 1 selector switch
Alpha 4012-3	8 double speed pushbuttons + 4 single speed pushbuttons
Alpha 4012-3S	8 double speed pushbuttons + 3 single speed pushbuttons + 1 selector switch
Alpha 4012-4	10 double speed pushbuttons + 2 single speed pushbuttons



FOMOTECH

INTERNATIONAL CORP.

SYSTEM SPECIFICATION

Transmitter Unit

Frequency Range	PLL 301, 433, 480 MHz
Transmitting Range	80 Meters (open areas)
Continuous Operating Time	8 Hours
Security ID Code	65,536 sets (16 + 1 bit)
Channel Spacing	25KHz
Hamming Distance	D ≥ 4 + CRC8
Frequency Control	Quartz Crystals (PLL)
Frequency Drift	< 5ppm @ -10 °C ~ 70 °C
Frequency Deviation	< 1ppm @ 25 °C
Spurious Emission	> 50dBc
Transmitting Power	~1.0mW
Emission	F1D
Antenna Impedance	50 ohms
Enclosure Rating	IP-66
Source Voltage	4.2VDC lithium / 1800mA
Current Drain	~20mA@3.7V
Operating Temperature	-10 °C ~ 70 °C
Dimension	273mm X 65mm X 52mm (12 pushbuttons) 228mm X 65mm X 52mm (8 pushbuttons)
Weight	A4008: 530g (battery included) A4012: 600g (battery included)

Note: Longer or shorter transmitting ranges are available upon request.

Receiver Unit

Frequency Range	PLL 301, 433, 480 MHz
Channel Spacing	25KHz
Hamming Distance	D ≥ 6 + CRC8
Frequency Control	RX module card or synthesizer (PLL)
Frequency Drift	< 5ppm @ -10 °C ~ 70 °C
Frequency Deviation	< 1ppm @ 25 °C
Sensitivity	< -125dBm
Antenna Impedance	50 ohms
Data Decoder Reference	Quartz Crystals
Responding Time	50mS ~ 150mS
Enclosure Rating	IP-66
Source Voltage	100 ~ 240VAC @ 50/60 Hz (standard equipped)
Power Consumption	MAX 32W@240VAC 50Hz
Operating Temperature	-10 °C ~ +75 °C
Output Contact Rating	250V @ 10A
Dimension	300mm X 171mm X 115mm
Weight	4,500g (without output cable)

Note: Other types of source voltages are available upon request.

Distributed by:

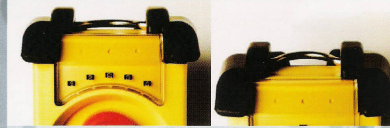
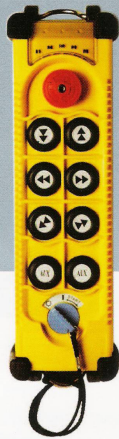
Alpha 4000

Alpha 4000 is an advanced industrial remote control. It can be widely applied to the industrial purposes, such as: various cranes, tower cranes, production machinery, auto-machinery, auto control machinery...etc.

Professional and wise design

Visualized Software

It allows you to set every function of your remote control via software. Base on the system type selected, you may create all kinds of combination with the software to fit different working environments.



The 5 LEDs show the status

The LED on the middle top of the transmitter shows the current status of the radio remote control whereas the rest of the 4 LEDs show the current status of the pushbutton setting.

Transmitter is designed with shock absorbing

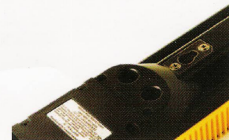
The shock absorbing rubbers on the four corners of transmitter strengthen the shock absorbing ability.

Alternative in startup

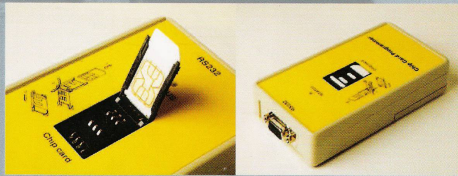
The transmitter is equipped with either On/Off key switch or infrared startup.

Electromagnetic induction charge

Undisclosed metal and open type contact of battery charger provides immediately charging simply by placing the transmitter on the charging holes.



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Chip Card - function set via chip card

- 1 Breakdown update
If any remote control is out of order, you simply need to take out the chip card from chip card holder and insert it into the chip card slot of the same system type to proceed with the operation.
- 2 Same system type copy
Chip card data backup can be done by file saving / reading via chip card programmer. If same function and setting are needed in the future, you only need to re-call the original file and correct/save data in the chip card.
- 3 Setting/Modification for any function
Remove chip card and modify the desired function via software.

Changeable PCB

The Alpha 4000 receiver is designed with changeable PCB. It allows the expansion or modification of function setting simply by changing relay cards.

Frequency adjustment and drift correction on PLL RF module

PLL (Phase Lock Loop) synthesized RF module with user-selectable RF channels (narrow band FM) for the transmitter code transmission. Transmitter and receiver channels are changeable. Frequency is also adjustable and can be corrected for any frequency drift automatically and manually.

