

## Transmitter Batteries

2 AA size alkaline batteries are required for the transmitter. Do not use rechargeable batteries. During operation, the LED flash green when battery power is full and flash red intermittent every 2 seconds when battery power is low. When battery power is low, the operating distance will become shorter. For safety reason, replace new batteries immediately when battery power is low.

## Receiver Power Supply

Each AC transformer provides 3 different voltages to meet different application's need. Please follow the procedures below to select the voltage.

1. Disconnect the receiver power.
2. Remove connector plug of the transformer from its original position.
3. Insert connector plug into the new voltage position.

## Transmitter LED Malfunction Alert

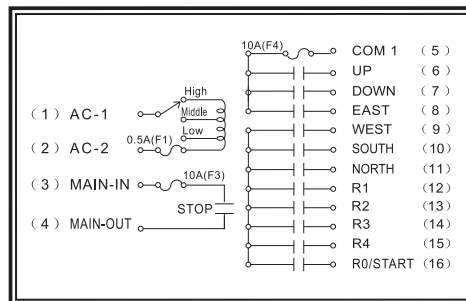
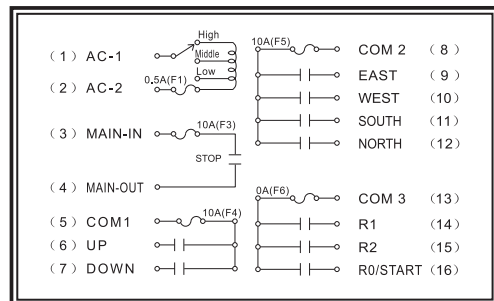
- ▲ Red color LED flashing quickly when any pushbutton is pressed. The problem could be following:
  - (1) One of the pushbuttons is jammed.
  - (2) The transmitter is not properly Power-On according to the instructions.
 Note: Please contact the distributor nearest you for further assistant if need.
- ▲ TX LED flashes slowly (every 0.5 sec intermittent). The problem could be:
 

The memory of the TX is defective. Contact the distributor for repair.

## Receiver Wiring Diagram Instruction

F-23A++(S) Wiring Diagram

F-23BBS Wiring Diagram



## WARRANTY

### Limited Warranty

TELECRANE guarantees that this product meets its published specifications at the time of shipment from the factory. Under proper installation it should work as expected. However, TELECRANE cannot guarantee that operation in TELECRANE system is absolutely error-free, or without interruption.

### Warranty period

This equipment is warranted against defects in material and manufacturing for a period of one year from the date of shipment. During the warranty period, TELECRANE is responsible for necessary repair as long as the product can be proven to be defective.

For warranty service or repair, this product must be returned to the service facility designated by TELECRANE. Buyer will pay for shipping charges to TELECRANE while TELECRANE will bear return shipping charges.

### Excluded Items

This warranty does not include consumable parts such as batteries, fuses, buttons and relays. Also this warranty does not cover failure or damage resulting from misuse, accident, unauthorized modification, unsuitable operating environment, natural disasters, improper software setting or improper maintenance.

### Limitation of liability and remedy

If your TELECRANE product fails to work as warranted above, TELECRANE maximum liability under this limited warranty is expressly limited to the lesser of the price you have paid for the product. TELECRANE disclaims any liability as a result of any direct/indirect, special, incidental or consequential damages.

### Remarks

No other warranty is expressed or implied, except for the above mentioned. Any use of this remote control product would be regarded the same as agreed to all clauses within this user manual.

## ATTENTION

### Attention

- Please carefully read the manual before installing and operating this device.
- Due to the complex nature of this equipment, it is necessary to read the entire manual before installation.
- The equipment has been stringently tested for quality assurance before delivery from factory. However, it must not be used in extremely dangerous situations, or where damage may result.
- After operation, shut off both crane main power and receiver power, and remove transmitter key.
- After operation, by pressing "STOP" pushbutton switches off receiver unit then keeping the transmitter in a safe place when not in use to avoid any unintentionally operation.
- The crane should be equipped with main power relay, limit switch and other safety devices.
- Do not use this device during electrical storm or where there are conditions of high electrical interference.
- Make sure that the batteries are in good condition and power for receiver is correctly supplied.
- The installation and maintenance service is allowed only when the receiver power is disconnected to avoid electrical shock.
- The contents of this manual may be amended by the manufacturer without notice.
- The specification and function of remote control is subjected to change without notice by manufacturer.

### Precautions

- ▲ To avoid any interference, the receiver must be placed as far as possible from frequency inverter and power cable as possible.
- ▲ The receiver should be installed on the top of the electrical control box. Do not mount the receiver inside the electrical control box.

### Emergency

In case of Emergency, please follow the procedure below and contact the distributor for service immediately.

1. Press STOP button of transmitter.
2. Remove the key from transmitter.
3. Switch off the main power of crane.
4. Contact distributor nearest you immediately.

## F-23 Operation

### How to use

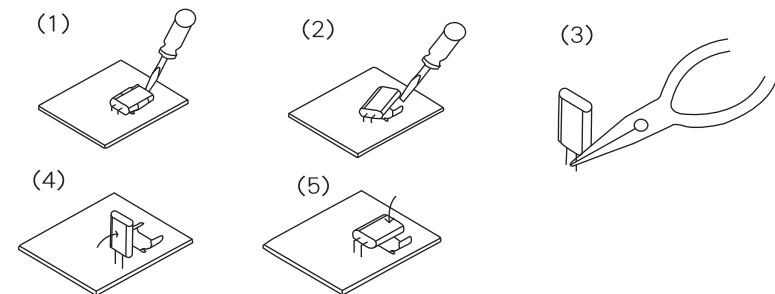
1. Insert 2 AA-size alkaline batteries into battery compartment.
2. Insert magnetic key to transmitter.
3. Follow the Power-On procedure to energize the receiver.
4. Operate normally according to the function settings.
5. Please follow the procedure to turn off radio controller after operation:
  - ▲ Press STOP pushbutton,
  - ▲ Remove the key and keep it in safe place,
  - ▲ Switch off the equipment's main power (e.g. Crane) ,
  - ▲ Remove the batteries when the equipment will not be used for a long time.

### How to change quartz from transmitter/ receiver & identify frequency quartz

It's simple to change frequency of the new F23 series. The system's frequency can be changed simply by replacing correspondent frequency quartz in both TX and RX.

#### Instructions:

- (1). Pry up the quartz unit with a flat screwdriver.
- (2). Remove the quartz unit from the system.
- (3). Use a needle nose pliers to straighten both pins of the new quartz unit.
- (4). Insert new quartz unit vertically into PC board.
- (5). Press new quartz unit down into the socket.



Note: The frequency will be different when plugging the same quartz unit into TX or RX, for example,

