

F24 -60 Operating Instructions

Warranty

Lee's Hi-Tech Enterprises Co., Ltd. guarantees that this product meets its published specifications at the time of shipment from the factory. Under proper installation it should work as expected.

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 repairs as long as the product can be proved to be defective.

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

Excluded Items

This warranty does not include consumptive parts such as batteries, fuses, buttons, relays. Also this warranty does not cover damages caused by improper installation, improper or insufficient maintenance, unauthorized modification, improper operation, ignorance of environmental specifications, or improper software setting.

Remarks

- ⊙ No other warranty is expressed or implied, except for the above mentioned.
- ⊙ The remedies provided herein are the buyer's sole and exclusive remedies. TELECRANE shall not be liable for any direct, indirect, special, incidental or consequential damages.

Attention

- ⊙ Never dismantle the equipment by any unauthorized personnel, or equipment may be damaged.
- ⊙ After finishing operation of TELECRANE radio controller shut off main power to the crane, power to receiver, and remove transmitter key. If transmitter's power is controlled by "rotary key switch", then need turn the key to "OFF" position and remove it.
- ⊙ The crane should be equipped with main power relay, limit switch and other safety devices.

Precautions (I)

To avoid any interference, the receiver must be placed as far as possible from frequency inverter and power cable as possible.

Precaution (II)

The receiver should be installed on 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 EMS button of transmitter.
2. Remove the key from transmitter.
3. Switch off crane main power.
4. Contact distributor nearest you immediately.

How to start

1. Insert 4 AA-size batteries into battery compartment.
2. Insert rotary key and switch to ON position.
3. Follow the Power-On procedure to energize receiver main relay.
4. Operate normally according to the function settings have been done.
5. Follow the instructions below to switch off the system: (1) Press EMS button /mushroom, (2) remove the key and keep it in safe place, (3) Switch off the equipment's main power (e.g. Crane)

Transmitter Batteries

Transmitter requires 4 AA size alkaline or rechargeable batteries. 3 stages power indicator available on transmitter. During operation, green LED indicator flashes when battery power is full and flashes yellow when battery power is low. Replace new battery immediately when yellow indicator appears, unloading and stop all activity until new battery is replaced. An EMS stop signal will be sent automatically to receiver accompany with red LED indicator if the transmitter power is below the limit.

Receiver Power Supply

Each transformer provide 2 option voltages for receiver power supply as below

- (1) 48/110 VAC
- (2) 110/220 VAC
- (3) 48/220 VAC
- (4) 220/380 VAC

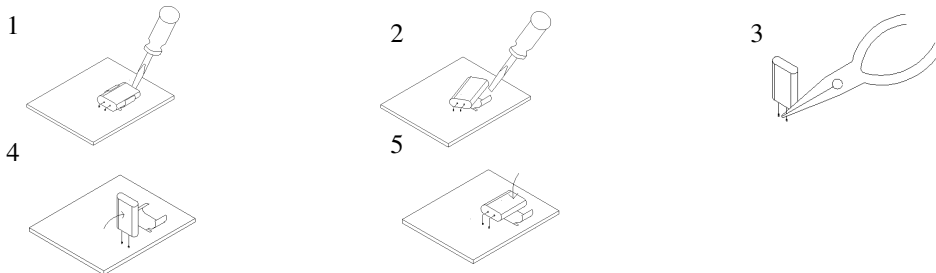
Changing Frequency & identify frequency quartz

It's easy to change frequency of new F24-60. The frequency can be changed simply by replacing correspondent frequency quartz into both TX and RX.

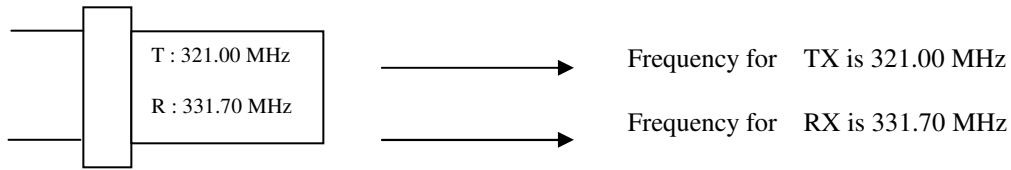
Note: There are 2 types of frequency are available: VHF and UHF. Do not replace the VHF quartz unit into UHF transmitter or receiver. The UHF and VHF frequency band can be found on both TX and RX RF module with a check mark "v".

Instructions:

- (1). Pry up the existing quartz unit with a flat screwdriver
- (2). Remove the quartz unit from the RF module.
- (3). Straight up both pins of the new quartz unit with pliers.
- (4). Insert new quartz unit vertically into the RF module.
- (5). Press the new quartz down into the socket.



Note: Each frequency quartz unit is having 2 different frequencies. The quartz frequency is different when installing into transmitter and receiver.



ID Code Remote Setting

ID Code Remote setting allows you to overwrite receiver ID code from transmitter. Before performing ID code remote setting, make sure both TX and RX are in same frequency channel.

Caution: The prior receiver ID code will be permanent erased once ID code remote setting is done.

Before ID code remote setting, please follow the instruction below,

- Make sure both TX and RX are same model and in the same frequency channel.
- Receiver JP1 jumper must be installed in order to perform ID code remote setting.
- To avoid interference during remote setting, have transmitter closer to RX as possible.
- Receiver AC power supply must be disconnect and turn on again after 20 seconds. (ID code remote setting must be completed within 4 minutes after receiver is being turn on again).

Instructions:

- (1) Disconnect receiver AC power supply completely (MAIN SWITCH) and turn on again after 20 seconds.
- (2) Press EMS button and switch Start Key into ON position.
- (3) Press R1 pushbutton and hold it (Do not release R1 button until next step is completed).
- (4) Press R2 button 4 times continuously and release all buttons when red LED flashing.
- (5) Start the system as usual.

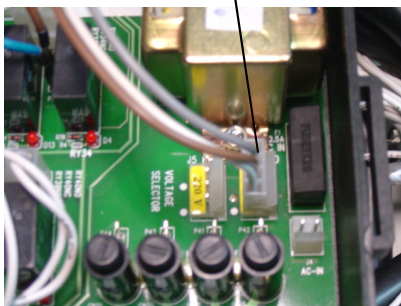
Warning: (1) Any other receiver within control distance, the ID code is possible to be overwritten unintentionally.
 (2) ID code remote setting synchronized ID code data only. No any other data will be overwritten or changed.

Changing receiver power supply voltage

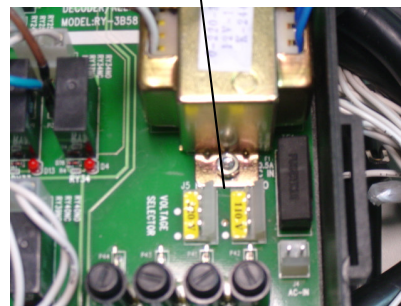
1. Disconnect receiver power.
2. Remove transformer connector plug from original position (Fig A)
3. Then insert connector plug into new position (Fig B)

48VAC	110VAC
48VAC	220VAC
110VAC	220VAC
220VAC	380VAC

Connector Plug



(Fig. A)



(Fig. B)

NC/NO output connection

Relay module are designed for both type of relay such NO and NC/NO. Both outputs connection of NC/NO relay are available on the relay module. To replace NC/NO relay, remove existing NO relay and insert a new NC/NO relay. Follow the relay module indication for new output wire connections for NC/NO relay.

COM Configuration

P1~P44 are terminal for COM, changing COM configuration by using wire included inside the packages. Different size of wire is available.

Troubleshooting

Symptom	Causes or solution
Transmitter red LED indicator flashing quickly (every 0.2 sec) when operating	<ul style="list-style-type: none">■ One of the pushbuttons is jammed.■ Joystick is not in neutral position.■ The EMS mushroom is not released completely.■ The transmitter is not properly Power-On. <p>Note: Please contact the distributor nearest you for further assistant if need.</p>
Transmitter green/Yellow LED indicator flashing crossly when start key switch on	<ul style="list-style-type: none">■ The joystick #1 memory is damaged. Contact the distributor for service.
Transmitter red/yellow LED indicator flashing crossly when start key switch on	<ul style="list-style-type: none">■ The joystick #2 memory is damaged. Contact the distributor for service.
Red LED indicator flashing quickly when start key switch on	<ul style="list-style-type: none">■ Transmitter main memory is damaged. Contact the distributor for service.
Transmitter red LED indicator remains on permanent	<ul style="list-style-type: none">■ Remove the batteries and re-insert again.
Receiver LED1 indicator flashing quickly	<ul style="list-style-type: none">■ Receiver main memory is damaged. Contact the distributor for service.
Receiver does not respond at all	<ul style="list-style-type: none">■ Switch off main power and switch on again after 20 seconds.