

How to start

- 1.Insert 2 AA-size alkaline batteries into battery compartment.
- 2. Insert rotary key and switch to ON position.
- 3. Follow the Power-On procedure to energize the main relay inside receiver.
- 4. Operate normally according to the function settings have been done.
- 5. After operation, please proceed as following: (1) Press EMS mushroom, (2) Remove the key and keep it in safe place,
- (3) Switch off the equipment's main power (e.g. Crane)

Transmitter Batteries

The AA size alkaline batteries are required for the transmitter.

The LED will flash green when the battery power is sufficient.

The LED will flash red when the battry power is low, and it is required to replace with fresh batteries immediately.

Receiver Power Supply

Each transformer provide 3 options voltage for receiver power supply as below

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

Changing frequency & Identify frequency quartz

It's easy to change frequency of new F24 series. The frequency can be changed simply by replacing correspondent frequency quartz into both transmitter and receiver.

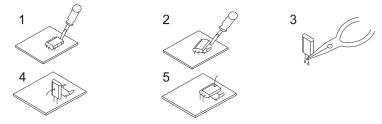
Note: There are 2 types of frequency are available: VHF and UHF Do not replace the VHF quartz unit into

UHF transmitter or receiver. The UHF and VHF frequency band can be found on both transmitter and
receiver RF module with a check mark "V".

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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.



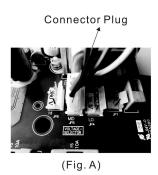
Note: Each quartz unit is containing 2 frequencies based on installing to transmitter or receiver module.

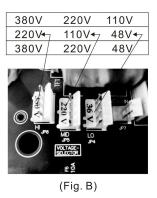
The result of quartz frequency will be different when installing on transmitter or receiver RF module.



Changing receiver power supply voltage

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







Use Manual

ID code Remote Settin

ID Code Remote setting allows you to overwrite receiver ID code by a new one from transmitter. Before making ID code remote setting, make sure both TX and RX are in same frequency channel and try to operate them in short distance.

Instructions:

- (1) Turn off receiver power supply completely (MAIN SWITCH) and turn on again after 20 seconds.
- (2) Press transmitter Emergency Stop
- (3) Press R1 pushbutton and hold it (Do not release R1 pushbutton until next step is com pleted).
- (4) Press R2 pushbutton 4 times and release "STOP & UP" pushbuttons when red LED flash.
- (5) Release all buttons
- (6) Start the system as usual.

Notes:(a) After power on the receiver again, there is only 4 minutes to finish the setting. If setting can not be finished in 4 minutes, the receiver would not receives the setting signal and would receiver normal working signals.

- (b) ID code remote setting jumper (JP1) on receiver must be installed in order to perform ID code setting.
- (c)Any other receiver ID code with same model may be overwritten also If located within con trol distance.
- (d)ID code remote setting only transmits ID code data. No any other data will be overwritten.
- (e) The position of the key and START will not influence the ID code setting

Fuse wire's changing

Push down the fuse blocks 'coverby screw driver, contra rotate it and take out the fuse Then put correctfuse on the cover and put them together in the fuse block. Then fasten the cover.

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

- 1. Transmitter red LED indicator flashing quickly (every 0.2 sec) when operating
- a. One of the pushbuttons is jammed.b. Joystick is not in neutral position.c.The EMS mushroom is not released completely.d.The transmitter is not properly Power-On.
- 2.Transmitter green/Yellow LED indicator flashing crossly when start key switch on.
- (The joystick #1 memory is damaged. Contact the distributor for service.)
- 3. Transmitter red/yellow LED indicator flashing crossly when start key switch on.
- (The joystick #2 memory is damaged. Contact the distributor for service.)
- 4.Red LED indicator flashing quickly when start key switch on.
- (Transmitter main memory is damaged. Contact the distributor for service.)
- 5. Transmitter red LED indicator remains on permanent.
- (Remove the batteries and re-insert again.)
- 6.Receiver LED1 indicator flashing guickly.
- (Receiver main memory is damaged. Contact the distributor for service.)
- 7.Receiver does not respond at all
- (Switch off main power and switch on again after 20 seconds.

NC/NO outputconnection

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 inserta new NC/NO relay. Follow the relay module indication for new output wire connections for NC/NO relay.

Warranty

Our company. 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, Our company, can't 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 repairs as long as the product can be proved to be de-fective. 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 defects caused by improper installation, improper or insufficient maintenance, unauthorized modification, improper operation, ignorance of environmental specifications, or improper software setting.

Remarks

- O 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.
- O 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 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 EMS button of transmitter.
- 2.Remove the key from transmitter.
- 3.Switch off the main power of crane.
- Contact distributor nearest you immediately.

F24-60

Common line	Relay contact	Command	Wire N0.	Remark
	F1 0.5A	AC-1	2-1	
	18	→ AC-2	2-2	
	∞ F3 10A	→ MAIN-IN	2-3	
	DB1 DB2	→ MAIN-OUT	2-4	-
F4 10A		→ COM1	2-21	
F7 10A		→ COM2	2-22	
F5 10A		→ COM3	2-23	
FE	10A	→ COM4	2-24	
	RY1	→ F1	1-1	
	RY2	→ R0/START	1-2	7
	RY3	→ R1	1-3	
	RY4	R2	1-4	
	RY5	→ R3	1-5	7
	RY6	→ R4	1-6	-
	RY7	→ SWA	1-7	
	RY8	→ SW BA	1-8	
	RY9	→ SW BB	1-9	
I	RY10	→ SW CA	1-10	
I	RY11	→ SW CB	1-11	
I	RY12	→ SW D	1-12	
•	RY13	→ 1Y(U)1	1-13	
I	RY14	→ 1Y(D)1	1-14	
I	RY15	- 1Y(U/D)2	1-15	
I	RY16	→ 1Y(U/D)3	1-16	-
I	RY17	→ 1Y(U/D)4	1-17	
Ī	RY18	→ 1Y(U/D)5	1-18	
Ī	RY19	→ 1X(L)1	1-19	-
T I	RY20	→ 1X(R)1	1-20	
Ī	RY21	→ 1X(L/R)2	1-21	
I	RY22	→ 1X(L/R)3	1-22	
I	RY23	→ 1X(L/R)4	1-23	
I	RY24	→ 1X(L/R)5	1-24	7
	RY25	→ 2Y(U)1	2-5	
I	RY26	→ 2Y(D)1	2-6	
I	RY27	→ 2Y(U/D)2	2-7	
I	RY28	→ 2Y(U/D)3	2-8	
I	RY29	→ 2Y(U/D)4	2-9	
I	RY30	→ 2Y(U/D)5	2-10	
1	RY31	→ 2X(L)1	2-10	
I	RY32	→ 2X(R)1	2-12	
1	RY33	→ 2X(L/R)2	2-12	
	RY34	→ 2X(L/R)3	2-13	
1	RY35	→ 2X(L/R)4	2-14	
1	RY36	→ 2X(L/R)5	2-15	
Ā	RY37	→ (AUX)1	2-16	-
Ž	RY38	→ (AUX)2	2-17	
	RY39	→ (AUX)3	2-18	
	RY40	→ (AUX)4	2-19	