- 2. Place two AA batteries in correct direction (For F21-E2S, the release ribbon must be placed under the batteries), and lock the battery cover.
 - Note: Before placing the batteries, make sure the Rotary KEY is on the "OFF" position.
- 3. Turn on the transmitter (For E2B, place the magnetic KEY into transmitter. For E2S, turn the Rotary KEY into "ON" position. For E2M, turn the EMS button clockwise), and press the "Start" pushbutton to Power-On.
- 4. Press motion button for operation.
- 5. To switch off the transmitter/receiver, please follow the procedure below:
- a) Press STOP or EMS mushroom button.
- b) Remove the KEY from transmitter.
 - Note: For E2S, turn the rotary key to "PULL" position and remove it from transmitter. For E2B, remove the magnetic KEY.
- c) Remove the batteries when the equipment will not be used for a long time.

◆ Transmitter LED indicator

Three stages power indicator

- 1. Green color (Full Power): Operate as usual.
- 2. Yellow color (Middle Power): Stop operation until new batteries are replaced.
- 3. Red color (Low Power): A Stop signal will be sent to receiver automatically to turn off receiver. To avoid the interruption during operation, check battery power frequently.

V Receiver Power

F21-E2B receiver voltage options: 24/48/110/220/380 VAC. The receiver voltage has been preset at factory, verify it before using.

VI Receiver wiring diagram

* F21-E2B/E2M/E2S

| WIRE COLOR | |
|---------------|---|
| BLACK | AC1° |
| BROWN | AC2 0.5A F1 |
| ORANGE | COM |
| RED | MAIN • |
| YELLOW | UP ◆──── |
| GREEN | DOWN ⊶—— |
| BLUE | EAST •—— |
| PURPLE | WEST ⊶—— |
| GREY | SOUTH •──────────────────────────────────── |
| WHITE | NORTH •─────────────────────── |
| PINK | R0 ⊶ → |
| _ | 1 |

* F21-E2M-4D

| WIRE COLOR | |
|---------------|-------------|
| BLACK | AC1 ~ |
| BROWN | AC2 0.5A F1 |
| ORANGE | COM = 54 |
| RED | MAIN • |
| YELLOW | UP •——— |
| GREEN | DOWN •—— |
| BLUE | EAST •——— |
| PURPLE | WEST •—— |
| GREY | U/D 2S •—— |
| WHITE | E/W 2S •——— |
| PINK | R0 •—— |

F21-E2B

Remote controller User manual

I 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.

Π 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 kev.
- ▲ 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

- ▲ Operating in an industrial facility is relatively dangerous; therefore, operator must have taken the adequate trainings in using F21-E2B system.
- ▲ Besides obtaining qualification certificate for operating this remote control product, users must also be both physically and mentally in well conditions, and has sufficient knowledge with safety precaution.
- ▲ Although F21-E2B transmitters are solid made for certain level of impact and weathering resistance, but any malicious destruction or improper use might still cause high possibility of potential damage.
- ▲ When transmitter battery power is low (Red LED), a STOP signal will be sent to receiver automatically to turn off receiver. The batteries must be replaced immediately .
- ▲ If the severe interference occurred, the operation must be stopped immediately.
- ▲ Please remove the batteries when the equipment will not be used for a long time.
- ▲ Be sure to know the "Procedures of Emergency" as follows.

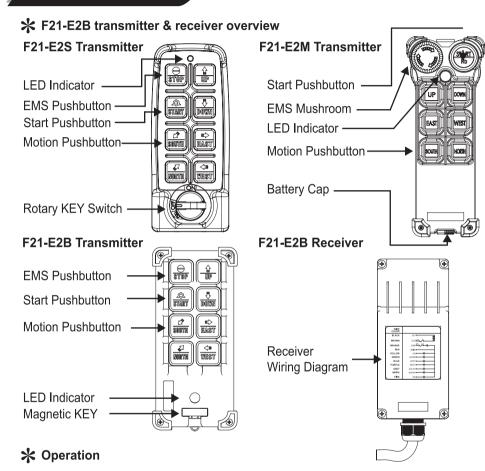
III PROCEDURES OF EMERGENCY

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

- ▲ Press "EMS" button.
- ▲ Turn the key to "OFF" position and remove it. (For E2S, turn the rotary key to the "OFF" position and remove it. For E2B, remove the magnetic key from transmitter. For E2M, remove the battery cap).

- ▲ Switch off crane main power.
- ▲ Contact authorized distributor for inspection.

IV HOW TO START



1. There is one e-Card installed on the transmitter and receiver respectively (The picture shown is referring to F21-E2S).



