



For

SAGA1-L40 Joystick type
Industrial Radio Remote Controller



SAGA 1 SAGA 1 Series

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1.0

Warranty

Gain Electronic Co., Ltd. guarantees that this equipment meets its published specifications at the time of shipment from the factory. Under proper installation it should work as expected. However, GAIN does not guarantee that operation in SAGA1 system is error free or without intermission.

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, GAIN 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 GAIN. Buyer will pay shipping charges to GAIN, while GAIN will pay return shipping charges.

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

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

2.0

Precautions of Operation

- 1.Please carefully read the manual before operating this device.
- 2.Never dismantle the equipment by any unauthorized personnel, or equipment may be damaged.
- 3.This manual is for reference only. Please consult your distributor for further assistance.
- 4.The equipment has been strictly tested for quality before delivery from our plant. However, this equipment must not be used in dangerous situations or where damage may result.
- 5.After operation, shut off main power to the crane, power to receiver, and turn the key to "OFF" position and remove it.
- 6.Transmitter should be placed in a safe area when not in use to avoid accidental pressing of buttons.
- 7.The crane should be equipped with main power relay, limit switch and other safety devices.
- 8.Don't use equipment during lightening or high electrical interference conditions.
- 9.Make sure that the batteries are in good condition and power for receiver is correct.
- 10.Maintenance should only be done while the crane's main power is off to prevent electrical shock.
- 11.Operating in an industrial facility is highly dangerous; therefore, operator must have adequate training in using SAGA1 system.
- 12.Those who operate the machine should be healthy and have good judgment in regards to safety.
- 13.Although the SAGA1 transmitter is very durable and weather resistant care should be taken not to expose it to severe impact or pressure.
- 14.If the severe interference occurred you should stop using the equipment at once.
- 15.Please take the battery out when the equipment will not be used for a long time.
- 16.Be sure to know the "Procedures of Emergency "

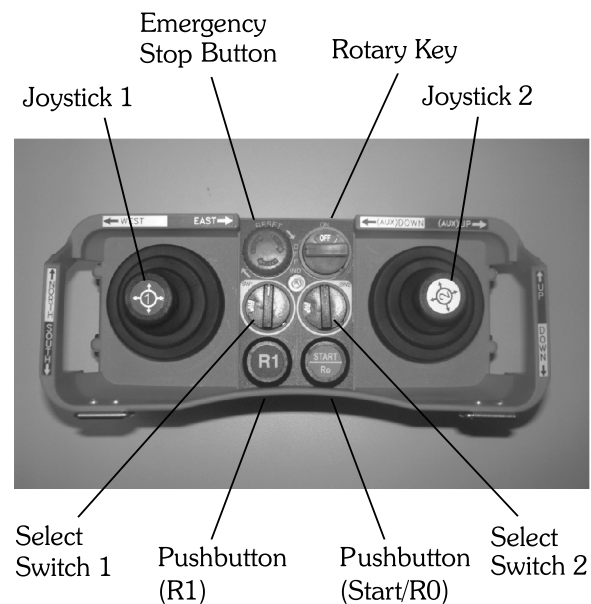


3.0

General Operation

- 1) Turn on the main power switch of the equipment (Crane).
- 2) Install four AA size batteries in the transmitter make sure the "+" and "-" direction are correct.
- 3) Turn the rotary key clockwise to "ON" position, then press the Start pushbutton to Power-On.
- 4) Operate normally according to the function setting has done.
- 5) Please proceed the following procedure after operation:
 - a) Press EMS mushroom and turn the rotary key of the transmitter to "OFF" position to shut off the motion of the receiver and remove the key.
 - b) Switch off the main power switch of the equipment (Crane).
 - c) Remove the batteries when the equipment is not going to be in use for a long period of time.

SAGA1 - L40 Transmitter

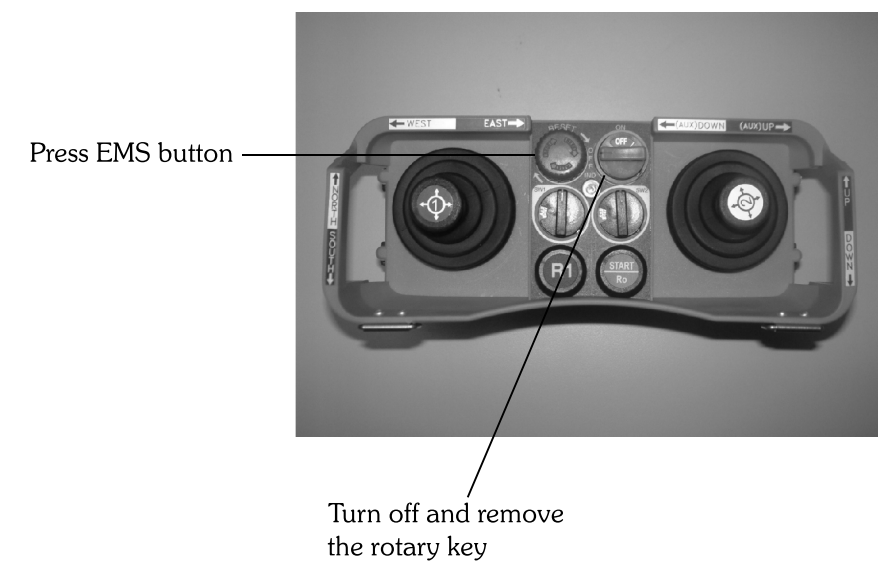


4.0

Emergency Procedures

In case of any emergency, please follow the steps below and ask the distributor for service immediately:

1. Press EMS mushroom.
2. Turn the rotary key to "OFF" position.
3. Shut off the main power of the Crane and discontinue the operation.
4. Contact the distributor to find out reasons.



5.0

Batteries

Four AA size batteries are required for the transmitter. There is a 3-stage power indicating function with LED display. "Green color": Sufficient power to operate transmitter. " Yellow color " : Power is depleting. Operation must be stopped immediately (for example: down the goods to ground) to replace batteries. "Red color": Insufficient power. Transmitter will send out an emergency stop signal to the receiver due to insufficient power. Operator should avoid this situation in order to maintain the safety of operation.

6.0

Receiver Voltage Selection

There are four input power voltages available for the SAGA1-L40 as follows:

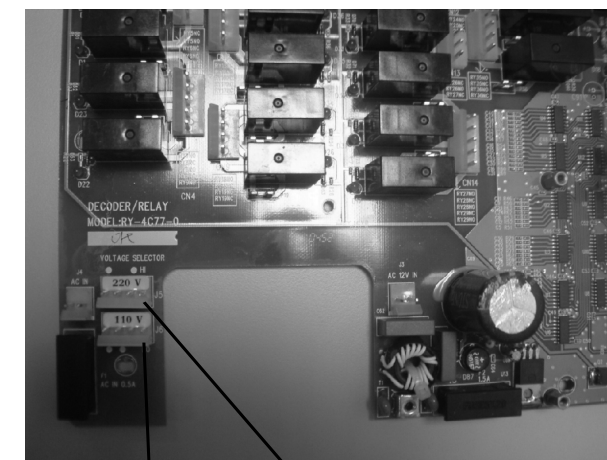
48/110 VAC

48/220 VAC

110/220 VAC

220/380 VAC

Please disconnect the RX's power, select the proper voltage and plug in the connector.



Switch the plug to choose voltage



7.0

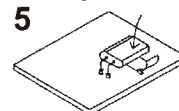
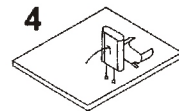
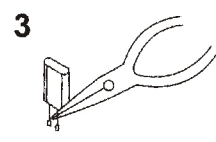
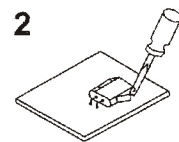
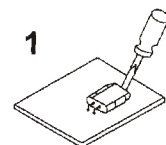
Changing the Frequency

It is easy to change frequency of the SAGA1-L series simply by replacing correspondent frequency crystal in both the TX and RX.

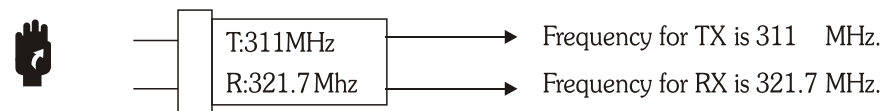
Note: To replace a new crystal, please note that there are two kinds of frequencies (VHF and UHF) available. The indication of VHF or UHF is shown on PC board with a check mark "V" and please make sure not to replace a VHF crystal unit into UHF PC board or vice versa.

Instructions:

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

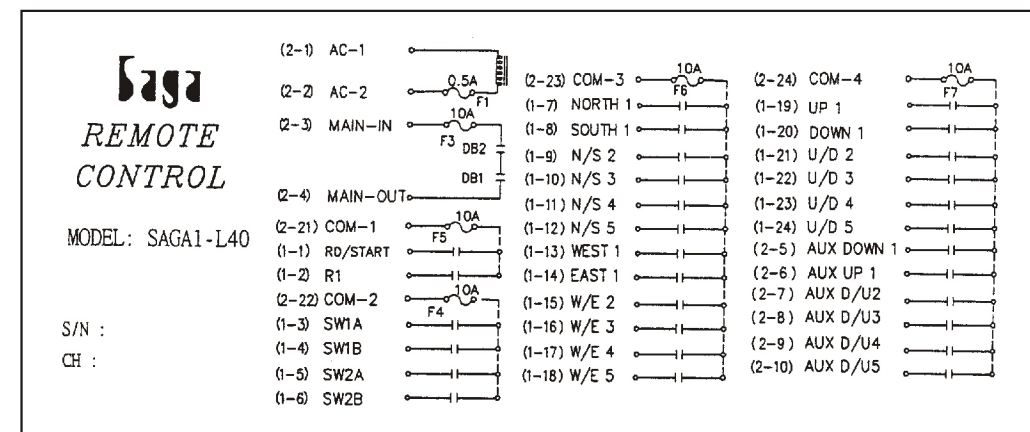


Attention: The frequency will be different when plugging the same crystal into the TX or RX. For example:



8.0

Wiring





SAGA1-Other Family Series



SAGA1-J Dual Joystick Type



SAGA1-D1&D2



SAGA1-C1&C2

Distributor: