



For

**SAGA1-L Series**

**-SAGA1-L10**

**-SAGA1-L12**

# SAGA1-L10/L12 User's Guide

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SAGA 1

SAGA1-L Series

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## Limited Warranty

### **Warranty**

Gain Electronic Co., Ltd. guarantees that this equipment meets its published specifications at the time of shipment from the factory. This equipment will perform as described if installed properly. However, Gain cannot guarantee that operation in SAGA product is absolutely error-free, or without interruption.

### **Warranty Period**

This equipment is warranted against defects in materials and workmanship 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 equipment must be returned to the service facility designated by Gain. Customer is responsible for shipping charges to Gain, while Gain 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 SAGA product fails to work as warranted above, Gain's maximum liability under this limited warranty is expressly limited to the lesser of the price you have paid for the product. Gain disclaims any liability as a result of any direct/indirect, special, incidental or consequential damages.

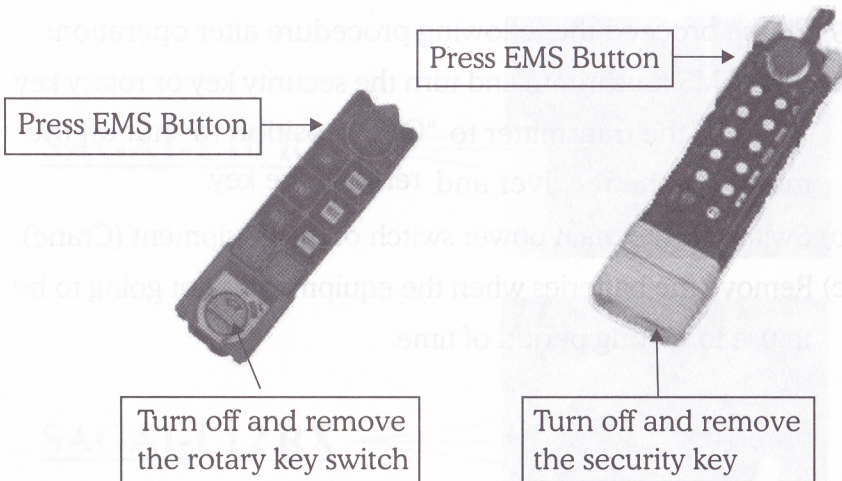
### **Remarks**

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.

## 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 security key or rotary key switch to "OFF" position.
3. Remove the battery box and key.
4. Shut off the main power of the Crane and discontinue the operation.
5. Contact the distributor to find out reasons.



**SAGA1-L10 TX**

**SAGA1-L12 TX**

## General Operation

- 1) Turn on the main power switch of the equipment (Crane).
- 2) Install two AA size alkaline batteries in the transmitter.
- 3) Turn the security key to "ON" position and press the Start pushbutton to turn on the main relay inside the receiver (For SAGA1-L12).  
\*For SAGA1-L10 turn the rotary key switch clockwise to "ON" position, then continue to turn it to "START" position 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 security key or rotary key switch 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.

### Remarks

No. SAGA1-L12

No. SAGA1-L10

above mentioned. All the details of the equipment would be provided in the manual. Please refer to this user manual.

## Receiver Voltage Selection

There are two types of power voltages (DC and AC) available for the SAGA1-L series:

### 1) DC Type:

Input Voltage : 12~24 VDC

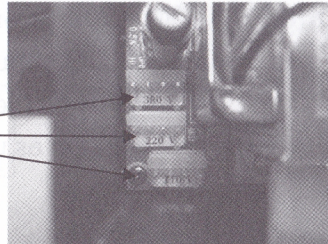
Relay Contact: 10A-36VDC

### 2) AC Type:

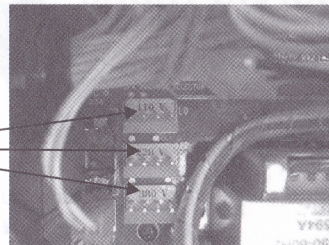
Three different AC transformers: 48/110/220V, 48/220/380V, 110/220/380V.

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

### SAGA1-L10 RX



### SAGA1-L12 RX



Switch the plug to choose voltage

## ID-Code Remote Setting

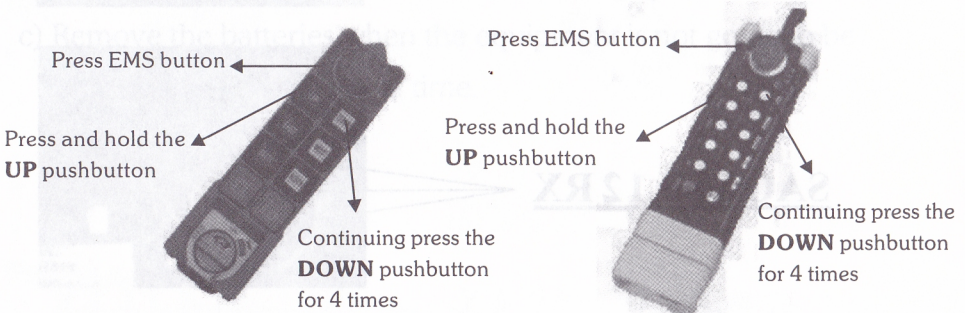
ID-Code remote setting allows you to pair the new TX or RX if one of them is damaged. Using ID-Code remote setting will make both the TX and RX to have the same ID-Code.

### 1). Please make sure the following conditions before ID-Code remote setting:

- (a) Both TX and RX are of the SAME model and frequency.
- (b) Place the transmitter as close as possible to the receiver to avoid interference.
- (c) Turn off the RX power more than 10 seconds and turn it on again.

### 2). ID-Code remote setting Instructions:

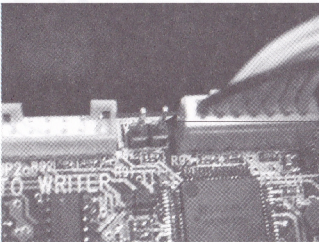
- (a) Press and hold the transmitter EMS button.
- (b) Press UP pushbutton and hold it.
- (c) Press DOWN pushbutton 4 times and release "EMS & UP" pushbuttons when the red light on the transmitter is flashing.
- (d) Start the system as usual.





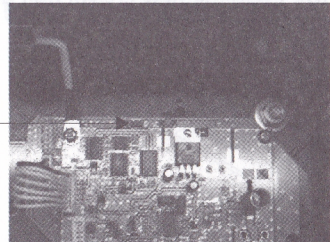
## ATTENTION:

- \* In case ID-Code remote setting fails, repeat the instructions above within 4 minutes.
- \* ID-Code remote setting is available for ID Code only. It will not change function settings.
- \* Within the operating distance, all same model systems on the same frequency will be paired with the transmitters ID Code.
- \* A jumper added inside the receiver is necessary to enable the ID-Code remote setting function.



**SAGA1-L10 RX**

Jumper to add  
for ID-Code  
remote setting



**SAGA1-L12 RX**



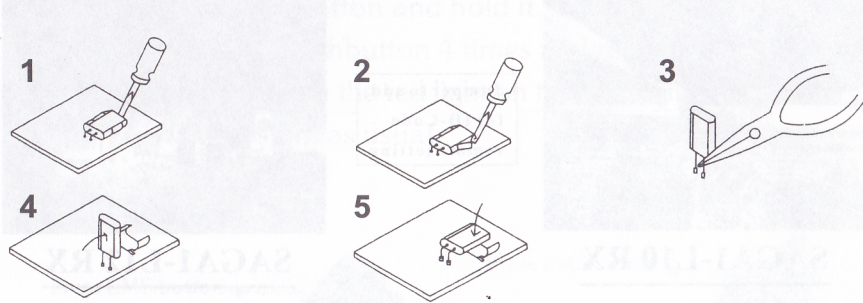
## Changing the Frequency

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

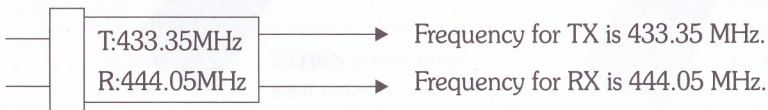
*Note: To replace a new crystal, please note that there are two kinds of frequencies (VHF and UHF) available. The indication of VHF or UHF is shown on PC board with a check mark "V" and please make sure not to replace a VHF crystal unit into UHF PC board or vice versa.*

**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.



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



## Batteries

Two 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 battery power is low.

- \* The operating distance will become shorter and intermittent when the battery is low.
- \* Replace with new battery when battery power is low.



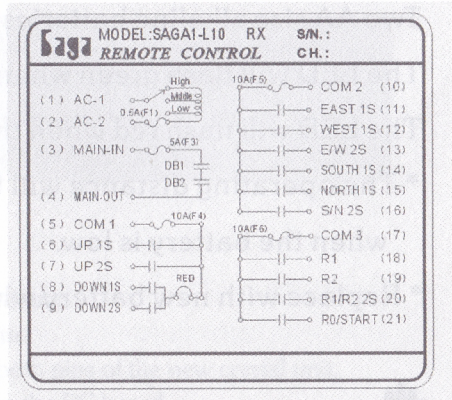
**Do not use rechargeable batteries.**



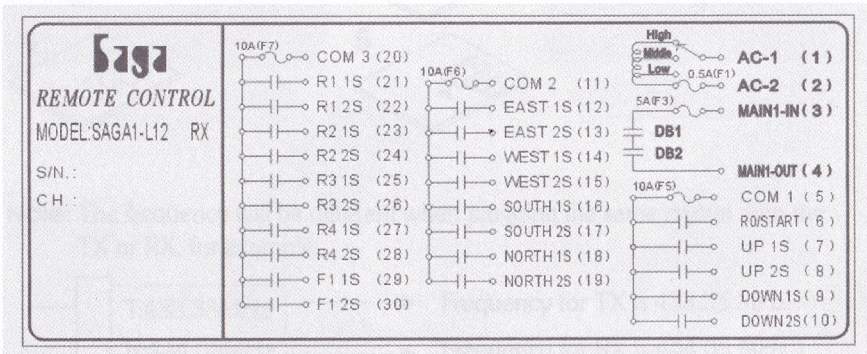
# Wiring

All SAGA1-L10/L10-1, L12/L12-1 are pre-wired, and the single and dual speed models are using the same cable. When it is single speed model (L10-1/L12-1), there are no relays for second speed contacts. In SAGA1-L10-1, cable number 7, 9, 13,16, 20are not used;in SAGA1-L1 2-1, cable number 8, 10, 13, 15, 17, 19, 22, 24, 26, 28, 30 are not used.

When the second speed relays are added, and 2-step pushbuttons are changed,the SAGA1-L10-1or L12-1 will turn to SAGA1-L10 or L12 without other software or firmware reinstall needed.



SAGA1-L10 Wiring Diagram



SAGA1-L12 Wiring Diagram



SAGA 1

SAGA1-L Series

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Distributor:



REMOTE CONTROLS

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