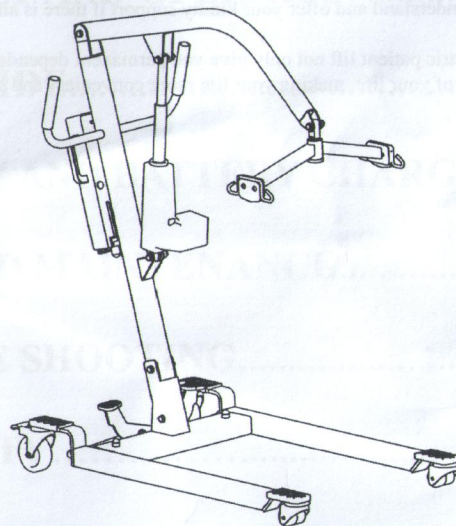


Electric Patient Lift

Owner's Manual



Please read this owner's manual carefully before operating your electric patient lift and keep it for future reference. Rev.: V.02

Dear Customer:

Thank you for our purchasing electric patient lift.

Please read this owner's manual thoroughly before operating your electric patient lift. If there is anything in this manual you do not understand, or if you require any additional assistance, please contact the authorized distributors.

This owner's manual specifies the operation ways and assembling instruction for each part of electric patient lift, and disposal solutions as well in case of accident. Please pay close attention on the warnings, attentions and suggestions.

This user's manual contains: maintenance record and warranty. Please well keep them.

With the change of design, all information and pictures in this owner's manual is subject to ex-factory, please understand and offer your kindly support if there is any change without notice.

We believe our electric patient lift not only give you permanent dependable operation and also enhance the quality of your life, making your life more convenient and splendid.

CONTENTS

1. SAFETY.....	3
2. PARTS INTRODUCTION.....	3
3. SPECIFICATIONS.....	4
4. ASSEMBLY AND OPERATION.....	4
5. USER GUIDE.....	7
6. BATTERY AND BATTERY CHARGING...13	
7.CARE AND MAINTENANCE.....	14
8.TROUBLE SHOOTING.....	16
9.WARRANTY.....	18

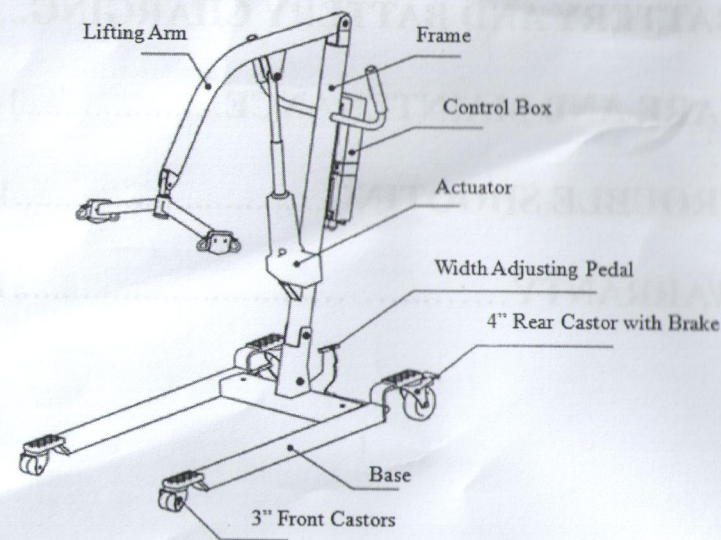
1.SAFETY

Safety

- Pre-use of product:
 - Assemble the product according to user's manual.
 - Properly fix the actuator onto electric patient lift.
 - Charge the battery no less than 4 hours until fully charged.
 - Read user's manual carefully until it is fully understood.
 - Appropriate guide and training shall be taken on users.
 - For the sake of safety and user's need, please select the right model, size, material, slings and accessories.

2.PARTS INTRODUCTION

•PARTS INTRODUCTION



3. SPECIFICATIONS

- Product Size: 1200x620x1225mm (LxWxH)
- Maximum Fork Range: 800mm
- Lifting Range: 850mm (lowest), 1750mm (highest)
- Max speed at no load: 16.6mm/s
- Max speed at full load: 6.7mm/s
- Input power: DC24V
- Motor: 24V/8000N
- Load Capacity: 185kg
- Net weight: 45kg
- Noise: 65dB(A)

4. INSTALLATIONS

1. Inspection and Acceptance

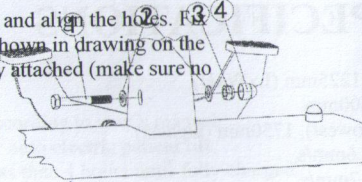
Please verify if there are omissions for parts (checklist for accessories shall be subject to list attached with the product). Once damages or omission happen, please get contact with us or its authorized distributors.

Description	Qty.	Image
Frame	1 set	
Control Box	1 pc	
Actuator	1 pc	
Controller + Cable	1 set	
Open Spanner #16 and #17	1 set	N/A
User's manual	1 pc	N/A

2. Installation Procedure:

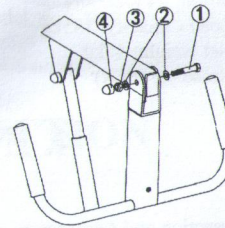
Step 1: Raise up the frame and align the holes. Fix M10x75 hexagon bolt as shown in drawing on the right and have nut properly attached (make sure no movement on the frame)

- ① Hexagon bolt M10x75
- ② Washer
- ③ ④ Nylon locknut M10



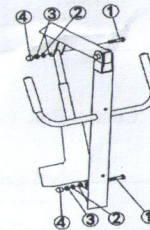
Step 2: Insert the lifting arm into upper groove of frame. Make sure the hole alignment, then clip the hexagon bolt M10x60 as shown on image on the right and attach the nut cover. (no movement on lifting arm is allowed)

- ① Hexagon bolt M10x60
- ② Washer
- ③ Nylon locknut M10
- ④ Nut cover



Step 3: Align the holes and fix the actuator. Clip hexagon bolt M10x60 as shown on drawings below and attach the nut cover properly.

- ① Hexagon bolt M10x60
- ② Washer
- ③ Nylon locknut M10
- ⑤ Cover nut



Step 4: Installation of control box

1. Fasten the 2 M5x10 screws into threaded holes from frame as shown on image 1.
2. Rotate the lock to direction of open. Fasten to control box onto frame and have the upper screws locked (Image 2)
3. Rotate the lock 90 degree to the right and lock the control box (Image 3)

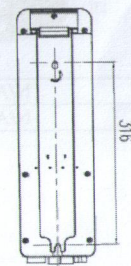


Image 1

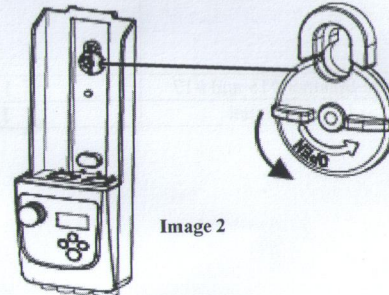


Image 2

State of "Open"

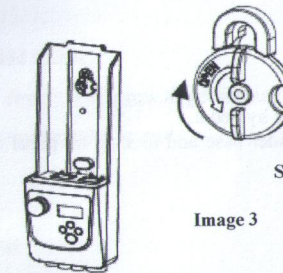


Image 3

State of "Closed"

Step 5: Remove and install the battery box

Removal: Press down the switch A and remove battery along direction of B.

Installation: Place the battery in place (image 2) and press the switch along direction of C. Ensure the battery won't be separated without pressing the switch.

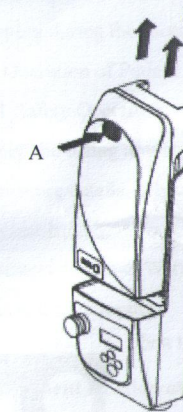


Image 2

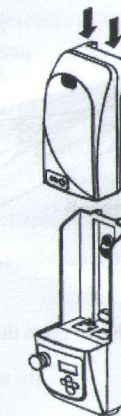
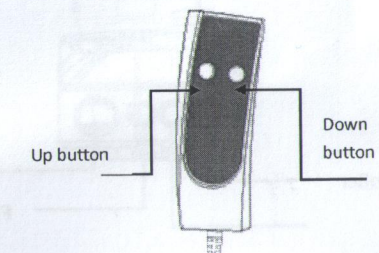


Image 3

5. USER GUIDE

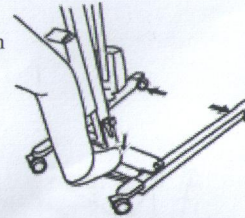
1. Use of controller:

Control the up and down of lifting arm by up and down button on the controller. Patient lift stop working once releasing the up and down button,



2. Base Width Adjustment

Width of base is able to be adjusted by pedal. Slam on pedal on the left for a wider base and to slam on pedal on the right for a narrower base.



3. Emergency Stop Button

Emergency stop button is used for switching on/off the power. It enables the motor stop working immediately in case of danger.

Switch off: press on the red button (see image A), then control device is suspended.

Switch on: rotate the red button clockwise (see image B) and control device is activated.

Highly recommended to press on this button provided that patient lift is not in use beyond 3 days to prolong the lifespan of battery.

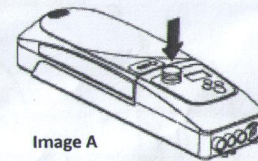


Image A

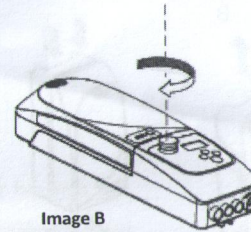


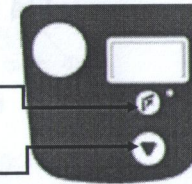
Image B

4. Emergency descent and ascent

In case of malfunction on the controller or no controller, to press the ascent and descent button to get the actuator back in place.

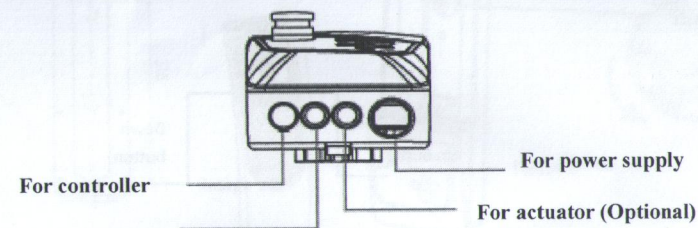
Ascent Button

Descent Button



5. Connection of Control Device

There are 4 ports on the control device, 1 for controller, 2 for actuator and the rest 1 for power supply.



For actuator

6. Manual emergency descent and ascent

Rotate the red sleeve along the direction of arrow to get manual emergency descent, the reverse to manually ascend.

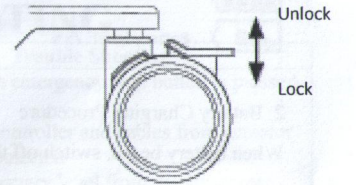


7. Lock and unlock of rear wheel

Rear wheels can be locked for no movement. Operate with your foot to lock and unlock the rear wheels.

Attention: It is unnecessary to lock the rear wheels for most of ascent and descent movement. We suggest only to lock the wheels when patient lift moves and may cause personal injury.

Warning: to lock the rear wheels of patient lift increase the risk of tipping during the ascent and descent movement.

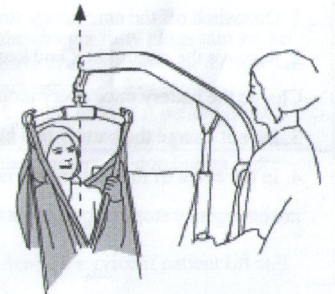


8. Operation of Patient Lift

8.1 Safety Operation

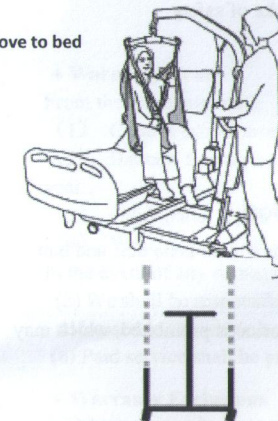
Keep the lifting arm and body vertical.

For more details, please refer to "Placement location of patient lift". Make sure the operation of patient lift is correct each time. Warning: An imbalance of ascent creates the risk of dumping.

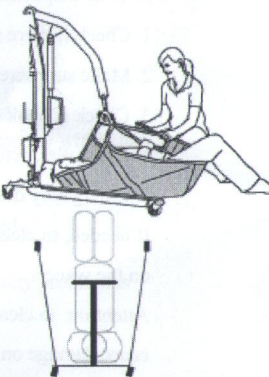
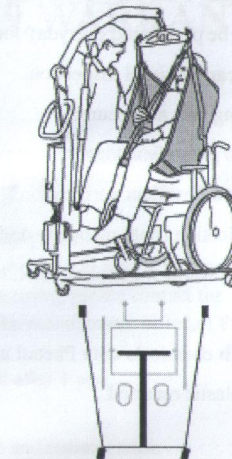


Placement location of patient lift

Move to bed



Move to wheelchair or commode



Notice: A pillow under the patient's head shall make her/him more conformation.

6. Battery Charging

1. When the battery has only 1 bar left, controller box shall keep beeping 4 times and remind you to charge immediately. Actuator shall not work without charging (battery level as shown in the picture below)



Battery level: 100%



Battery level: 75%



Battery level: 50%



Battery level: 25%

2. Battery Charging Procedure

When battery beeps, switch off the emergency stop button and plug in the controller box. Once battery is fully charged, the state of battery level shows 4 bars (100%) and LED on the control box no longer flashes.

Notes:

1. Do switch off the emergency stop button and stop using the patient lift when charging.
2. Remove the control box and keep it in a shade once patient lift shall be not used for a long time. Charge the battery once every month.
3. Do not charge the battery in a humid atmosphere.
4. In the event of that patient lift is not in daily use, it is strongly recommended that to switch off the emergency stop button so that to cut off the currency and keep the battery level.

7. CARE AND MAINTENANCE

Routine inspection listed below shall be performed everyday for the sake of safety.

1. Check if there is any damage or wear by visual inspection.
2. Make sure screws and nuts on lifting arm are secured.
3. Check if hook on lifting arm works properly.
4. Controller, actuator and base width adjustment verification.
5. Emergency descend function verification (both manually and electrically)

If needed, to clean the patient lift with warm water or alcohol. Make sure there is no dust and hair on the wheels.

Attention: to clean the patient lift with chemicals with Phenol and chlorine is prohibited, which may cause damage on plastic powder or plastic material.

Transportation and Storage:

Press the emergency stop button for transportation or not using the patient life for a certain of time.

Temperature for storage of patient life shall be higher than 0°C and relative moisture≤60%.

Inspection:

Make a full inspection at least once a year. Pay close attention on those worn part such as connection and screw bolt.

8.TROUBLE SHOOTING

Description	Trouble Shooting
Patient lift can not work (ascend and descend)	<ol style="list-style-type: none"> 1. Check if the emergency stop button is pressed down. 2. Verify the controller and cables from actuator is properly connected 3. Check the battery level from display screen on the control box. 4. Verify if there is any problem or damage on battery contact panel. 5. Ask for after-sale service if patient lift still can not work.
Charger can not charge the battery	<ol style="list-style-type: none"> 1. Check if the charger fully plugs into socket 2. Verify if there is any problem or damage on battery contact panel. 3. Ask for after-sale service if patient lift still can not work.
Patient lift stops when ascending	<ol style="list-style-type: none"> 1. Check if the emergency stop button is pressed down. 2. Employ the emergency descend device (see user guide) 3. Ask for after-sale service if patient lift still can not work.

9.WARRANTY

• Warranty terms

From the ex-factory date

- (1) Control box: 6 months free replacement and 1 year repairing guarantee
 - (2) Battery: free replacement if capacity of battery less than 60% of rated capacity within half a year.
 - (3) Other parts: 1 year repairing guarantee.
 - (4) Wearing part like wheels, pedals and plastic part :warranty is not provided.
- In the event of any damages when using, please contact the distributor.
- (5) We shall be responsible for the maintenance or recall the products once quality problem is addressed to the whole batch.
 - (6) Paid service shall be provided after 1 year.

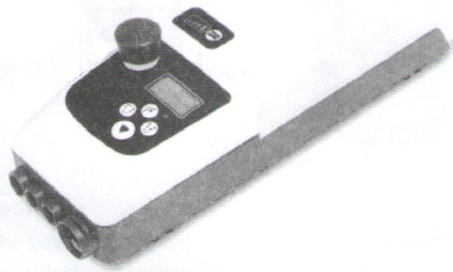
• Warranty Exclusions

1. Damage cause by improper use and maintenance.
2. Parts damaged due to spare parts from regular manufacturers are not in use.

Owner:	
Add:	Tel:
Model of Product:	Barcode:
Date of purchase:	
Warranty Period : (6 months excluded the battery),see notes for more details.	

Maintenance Record

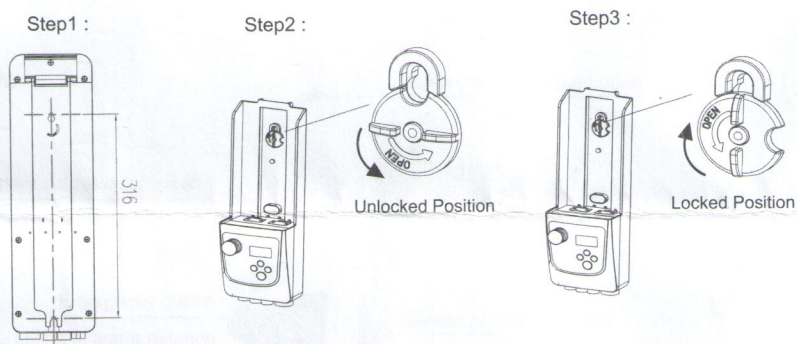
[illegible]



A. Installation

1. Control Box

- Step 1. Put two mounting bolts (M5 with 8mm head) onto the frame according to the drawing.
 Step 2. Turn the locker to "Unlock Position" (CCW), then mount Control Box onto the bolts of the frame.
 Step 3. Turn the locker clockwise to "Locked Position" to fix the Control Box.



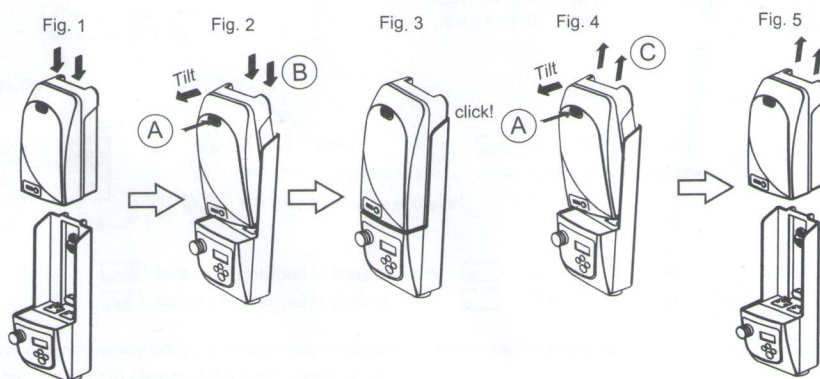
2. Battery Pack

2.1 Insert:

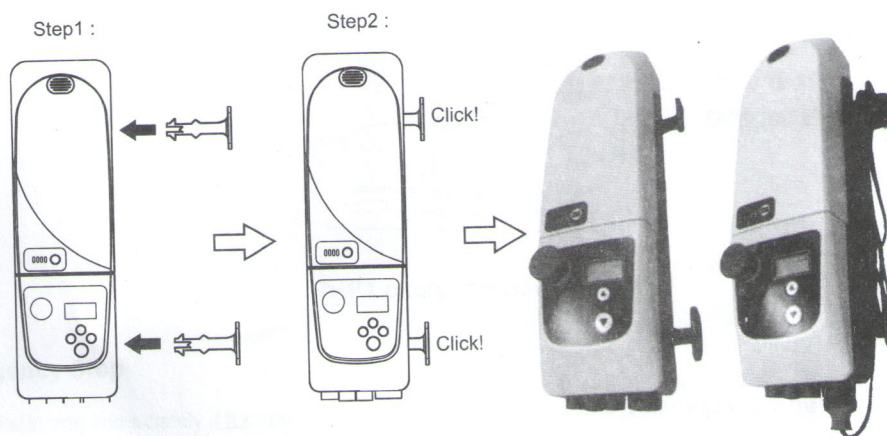
- 2.1.1 Hold the battery pack downward (Fig. 1)
 2.1.2 Tilt the pack a little bit to get a smooth installation and keep pressing the release button (Fig. 2 (A)/(B)).
 2.1.3 Push the pack downward till you hear "click"(Fig. 3), make sure the pack will not be pulled out by hand without pressing release button.

2.2 Remove:

- 2.2.1 Press release button and pull the pack out upward (Fig. 4 (A)/(C)).
 2.2.2 Tilt the pack a little bit at the beginning of pulling (Fig. 5), then pull out the battery pack.

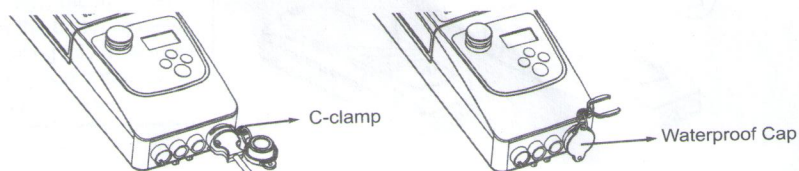


3. Hook



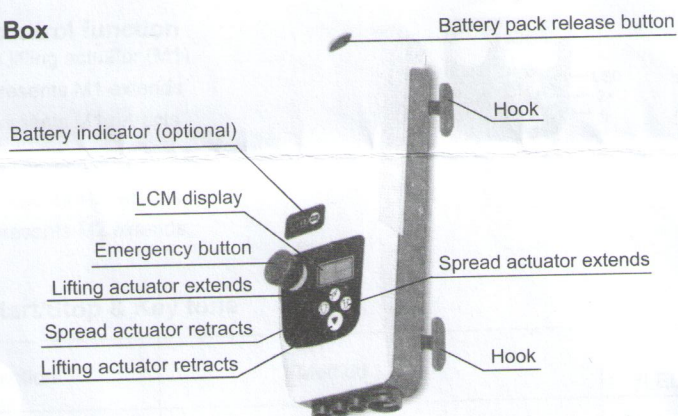
4. Anti-pull clamp & waterproof cap

1. C-clamp: When charging the battery, insert this C-clamp to lock the power plug.
2. Waterproof Cap: When control box is in service, insert this cap to prevent wetting.



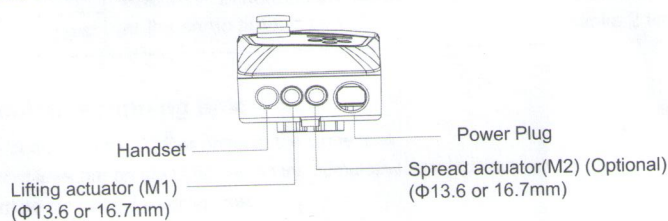
B. Interface

1. Control Box

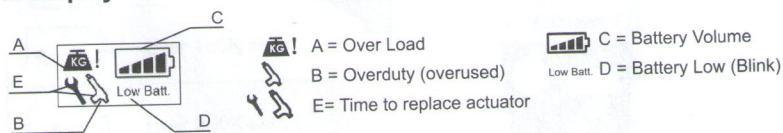


2. Connection

There are 4 ports for connection from left to right. The first one is handset port, the second is lifting actuator (M1), the third is spread actuator (M2, optional) and the last is power plug.



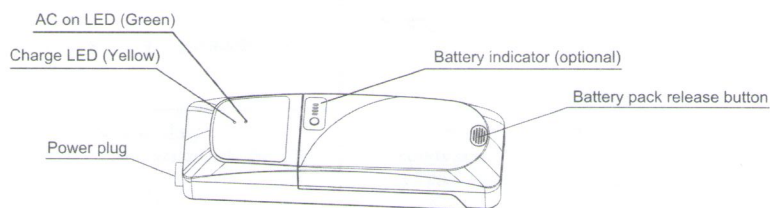
3. LCM Display



- Battery is charged to around 100%.
- Battery is charged to around 75%.
- Battery is charged to around 50%.
- Battery is charged to around 25%.

- 3.1 If the device continuously beeps 4 times every 4 seconds to alarm low battery and the LCM shows only one level bar, that means the user should charge the battery immediately.
- 3.2 All the function keys are no response, the level bar and LED indicator on the control panel blink at 1 Hz when charging.
- 3.3 The level bar and indicator stop blinking means charging is finished.

4. CHP1 Charger (Optional)



CHP1 charger + battery pack

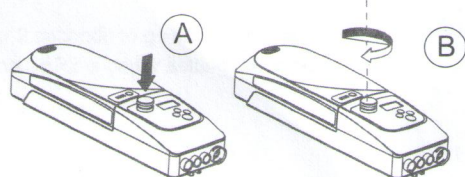
5. Emergency Stop

Press the button immediately if there was emergency issue. It cuts off the power supply and the device is shut down instantly.

i. Lock: Press the red button as shown in (A), then the button locked and the power is cut off.

ii. Unlock: Turn the red button in clockwise, as shown in (B), then the button bounded and the power is restored.

! We strongly recommend you to press the button in case of stopping using this device over 3 days, to keep the batteries always in good condition.

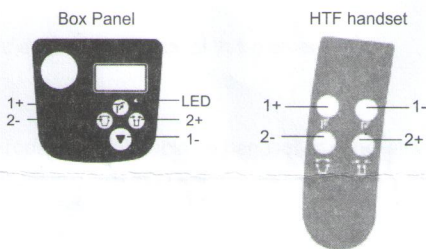


C. Operation

1. Basic control function

1 means lifting actuator (M1)
1+ : represents M1 extends
1- : represents M1 retracts

2 means spread actuator (M2)
2- : represents M2 retracts
2+ : represents M2 extends



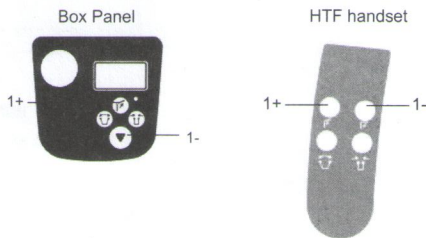
2. Soft Start/Stop & Key tone

Function		Method	Feedback (LED blinks or sound)
Soft Start/Stop	ON	Keep pressing "1+" button on HTF handset, then unlock the emergency button	Blinks 4 times, no sound
	OFF		Blinks 2 times, no sound
Key Tone	ON	Press 2+, 2- buttons on handset or panel at the same time.	Blinks 2 times, beep once
	OFF		Blinks 2 times, no sound

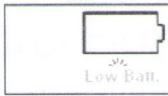

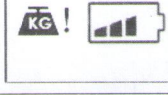

3. Check cumulative running time

- Press 1+, 1- buttons on the HTF or panel at the same time.
- The number of level bar on the LCM means the cumulative running time.
- It's approximate cumulative running time.

Level bar	Cumulative running time
	over 150K sec.
	over 300K sec.
	over 450K sec.
	over 600K sec.



4. Error code trouble shooting

Display	Information	Release
	Low battery (less than 20V DC, lifting actuator can only retract.)	Charging battery pack at once.
	Lifting actuator over duty (after 4mins continuous operating)	Stop operating command, (9 seconds rest to get extra 1 second for lifting, after 36 min. rest the system back to normal)
	Lifting or Spread actuator over load	Find out the root cause and remove the obstructions or load. Please call the agency if the error code keeps on.
	Cumulative running time over 600K seconds on lifting actuator.	Call agency to replace the actuator.

5. Setting mode (only available with service handset by service agency)

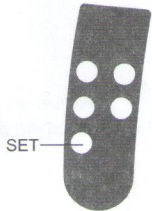
5.1 How to get in setting mode?

Press the SET button (the fifth key) over 2 seconds to go into set mode.

5.2 The over load icon keeps blinking means CBP2 is under setting mode now.



Service handset



5.3 How to quit setting mode?






5.3.1 Press the SET button over 2 seconds or without any input over 10 seconds.
The set data will be saved automatically.

5.3.2 If pressing the emergency button or remove the handset directly at this moment,
then all the set data is nullity.

5.4 When CBP2 under setting mode, we can:

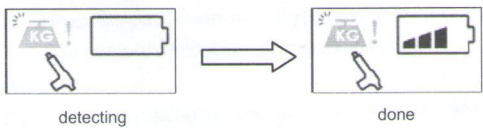
5.4.1 Set the M1 actuator current limit on demand (operation available on handset or panel as well)

- Press "2+" to increase the current limit on handset or panel
- Press "2-" to decrease the current limit on handset or panel
- The available range is 5~9A, step 1A.

Value	5A	6A	7A	8A	9A
Display					

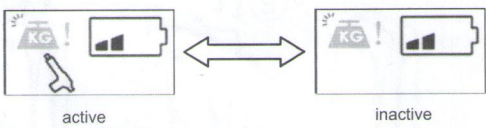
5.4.2 Detect the M1 actuator current limit by self-learning

- Press "1+" for 1 second
The lifting actuator extends automatically for 2.5 seconds
- The level bar disappeared means self-learning is on going, till the level bar appears again means the self-learning is done and CBP2 got a new current limit as shown below.



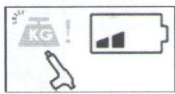
- The available range is 5~9A, step 1A.

5.4.3 Switching the "Over duty protection on M1" active or inactive by pressing "2+" & "2-" at the same time.



5.4.4 Reset

- Pressing "1+" & "1-" at the same time over 2.5 seconds.
- Then the device backs to default value, as shown below



- Default: Key tone and soft start/stop off, over duty protection active, current limit 7A.