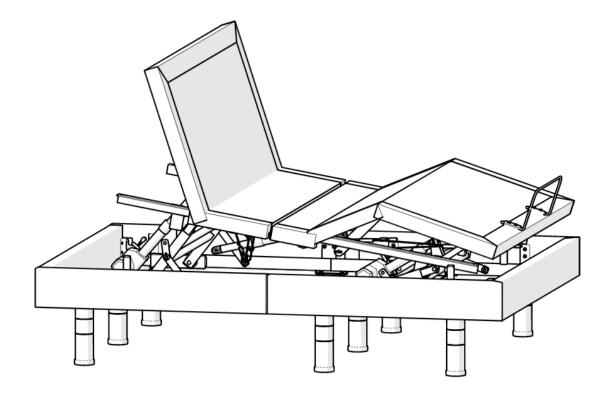
# Harmony



# Hi Lo Tilt HS Adjustable Base

# Assembly and Operation Manual

# **Specifications**

Weight Capacity	880 lb	Height	14.5~23.5 inches
Incline Degree	Backrest: 0°~65° Legrest: 0°~35°	Wall Hugger	X
Power Input	AC 100-240 50/60 HZ	Power Transformer Output	DC 29V 1.8A
Radio Frequency	2.4MHZ	Massage Vibrator	1
USB Charger	X	Bluetooth Control	Inbuilt
Floor Light	✓	Flash Light on Remote	✓

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#### **20 YEAR LIMITED WARRANTY**



# **Safety Precaution and Usage Guide**

## **Attention: SAVE THESE PRECAUTIONS AND USAGE GUIDES**

. Your new adjustable base has been strictly tested and inspected prior to dispatch. It is highly recommended to read these instructions thoroughly before you try your new adjustable base, in order to keep your high-quality adjustable base performing well in its lifetime but also to reduce the risk of fire, electric shock, burns or any injury to users.

# To decrease the risk of electronic shock, burns, or injury to users, children or pets, please follow these instructions.

- 1. After unpacking your adjustable, be aware of your **small children and pets**. Its packing material may put your **small children** or **pets** in **smothering dangers**.
- 2. **Unplug** the power cord from the power outlet **before installing** parts or **cleaning** your adjustable base.
- 3. **Keep** the power cord **away** from **water** and **heated areas**. If your adjustable base is **wet** or has a **frayed power cord**, please do not operate it.
- 4. Before you **disconnect** the power cable, please return your adjustable base to the **flat position** and **stop all operations**.
- 5. **Unplug** your electronic gadgets from the USB port (option) of your adjustable base if they are **fully charged**.
- 6. **Do not** operate your adjustable base if **small children** or **pets** are under your adjustable base. **Supervision** is required for operating your adjustable base if small children or pets are around your adjustable base. **Small children** are **not allowed** to operate your adjustable base without **parents** or **adult supervision**.
- 7. Adjust your Hi-Lo Base to the vertically **lowest height** when sleeping to prevent from injuries caused by falls.
- 8. In order to avoid trapped injures when operating Hi-Lo mode on two single bases use mattress with at least **20cm thickness**.
- 9. Use your adjustable base in compliance with the **restrictions**.

# To keep your high-quality adjustable base performing well in its lifetime, please follow these instructions.

- 1. Your adjustable base is only designed for **In-Home Use**. This adjustable base is not designed for **outdoor** or **commercial** purpose.
- 2. **Do not** unscrew or open the **control box**, **lift motors**, **massage vibrators** (option), **SMPS**, **wired handset** or **remote control** (option), and **other electronic components** on your adjustable base, except for opening the battery compartment on your remote control or SMPS. The warranty will be void if there is any component damaged by users. Only **authorized service personnel** are allowed to repair or replace parts.
- 3. **Do not** mix **different** types of **batteries** or old batteries with a fresh one for your handset or SMPS.
- 4. **Remove** the **batteries** from your **remote control** (option) and **SMPS** if your adjustable base will not be used for a long time period to prevent damage caused by **battery leakage**.
- 5. **Do not** sit on the **head** or **leg section** while in the raised position. It can damage your adjustable base and lead to shorter life expectancy.
- 6. **Do not** lift or move the base **during operation**. It might cause damage to your system.

- 7. **Do not** lift or move your adjustable base by **grabbing** its **mattress platform** or its **wood lower frame (option) furnished with fabric**. If it is necessary to lift or move your adjustable base, please do it by **grabbing** the **cross bars** of its metal frame.
- 8. Your adjustable base must be on **flat ground** to avoid damage to your product.
- 9. Use a **compatible mattress** for your adjustable base. A **memory foam mattress** or **latex mattress** is recommended. Some spring mattresses or pocket spring mattresses, for example, may not suit your adjustable base. Consult your mattress specialist to verify your mattress is compatible.

#### Restrictions of your adjustable base

- 1. Do not operate lift motors above the **10% duty cycle**. For example, after continuous 2-minute operation 18-minute rest is required.
- 2. Do not continuously or intensively operate the massage vibrators (option) above maximum 2 hours within 6 hours.
- 3. **Weight Restrictions**: the maximum weight limits on your adjustable base for Twin, Twin XL, Full and Queen are at a maximum of **400kg/880lbs** (evenly allocated across the mattress platform). This capacity includes the mattress and occupants. The warranty of your adjustable base will be void if excessive weight of 400kg/880lbs is loaded on your adjustable base.

#### **Electronic system information**

## **Radio Frequency Compliance:**

Radio Frequency: 2.4 MHZ.

FCC ID:

Your Device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

#### Attention:

In compliance with FCC RF exposure requirements, there must be no change to the antenna or the device without permission. Users may be deprived of his/her right to the device if the device exceeds the RF exposure requirements caused by any change the antenna.

#### **Power Ratings:**

Input: AC100-240V 50/60Hz 1.5A

Output: DC29V 1.8A Protection Class: Class II

# **Parts List**

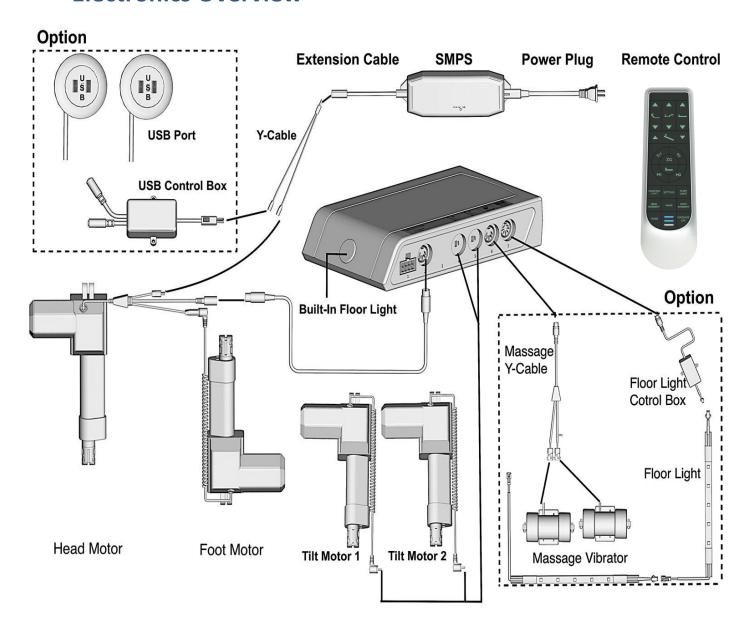
## IMPORTANT NOTE:

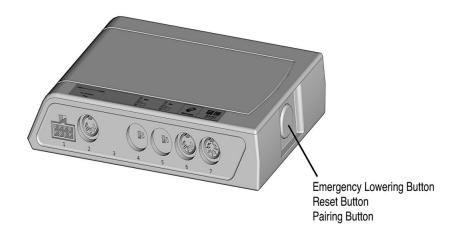
Check and confirm the following items are included in the carton, BEFORE disposing of any packing materials.

A. Remote Control * 1		B. SMPS * 1 (Switched Mode Power Supply)
C. AC Main Cable * 1		D AAA Battery * 3
E. Support Leg * 8	4	F. Head Motor & Foot Motor
G. Hex Key * 1	H-1 H-2	H. Headboard Brackets * 2sets
I. Wrench * 1		J. Bolt for Headboard * 8
K. Nut for Headboard * 8		L. Washer for Headboard* 16
M. Mattress Retainer * 1		N. KD Connector *2
O. Clevis Pin * 8 (TXL *6)		P. Cotter Pin * 8 (TXL *6)

	Q. Center Cross Brace * 2 ( TXL *1 )	R. Connecting U-shape Bar *2
	S. Connecting Rod * 2	T. Wing Bolt * 8
n	U. U-shape Bracket * 4	V. Spring Washer * 8
	W. Bolts for Center Cross Brace*4 (TXL *2)	X. Side Retainer * 2
	Rail A & B	Rail C
	OPTIONAL Sync Cable * 1 (TXL ONLY)	

# **Electronics Overview**



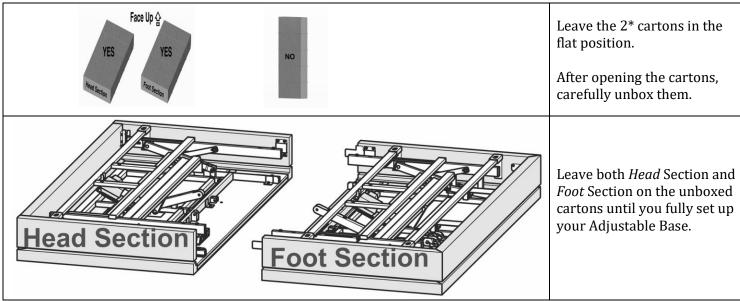


# **Assembly Guide**

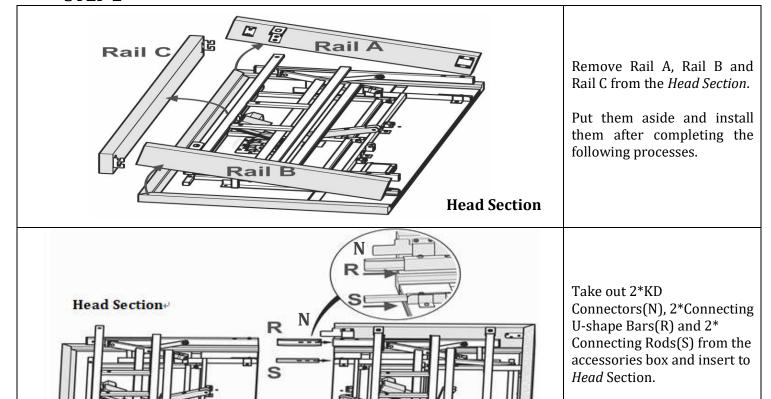
#### **IMPORTANT NOTE:**

Two people are required to set up your adjustable base.

#### STEP 1



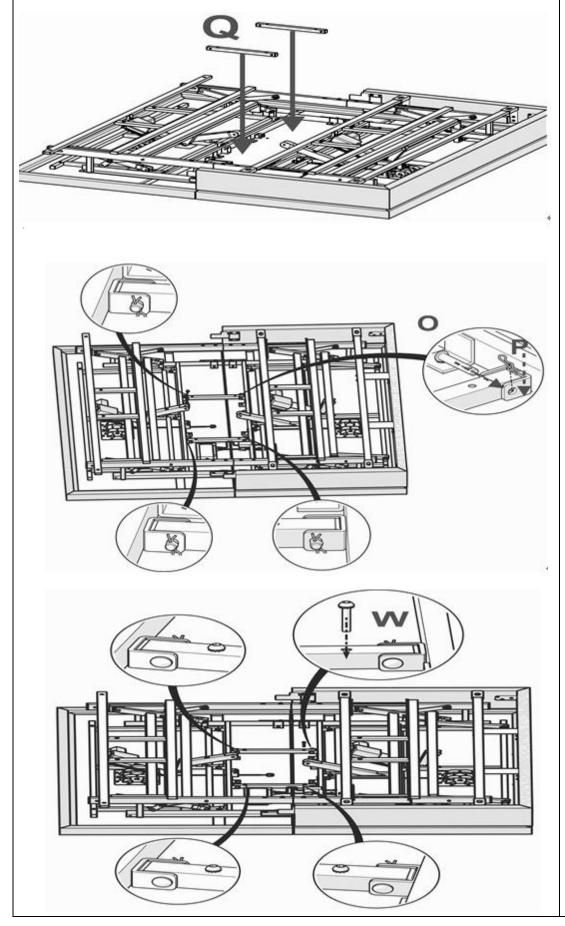
#### STEP 2



Foot Section€

Slide *Foot* Section onto the

other side.



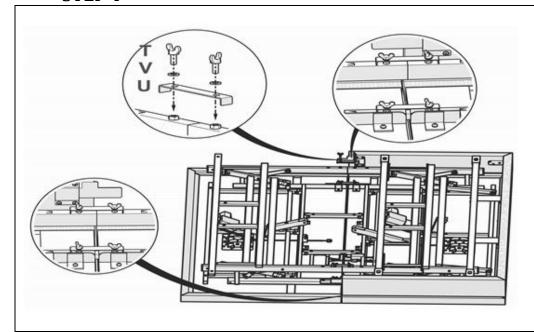
Take out 2\*Center Cross Braces (Q), 4\*Clevis Pins(O), 4\*Cotter Pins (P), 4\*Bolts for Center Cross Brace(W) from the accessory box.

\*There's only 1\*Center Cross Brace, 2\*Clevis Pin, 2\*Cotter Pin, 2\*Bolts for TXL Base.\*

Put Center Cross Braces (Q) into their corresponding brackets of the two cross tubes (one on the Head Section and the other one on the Foot Section), as shown in the picture.

Insert each Clevis Pin (0) through the brackets and holes of Center Cross Braces (Q).
Then, insert each Cotter Pin (P) through the holes of each Clevis Pin (0), as shown in the picture.

To make it Center Cross Braces (Q) securely locked, insert the Bolts for Center Cross Braces (W) through the holes on it.

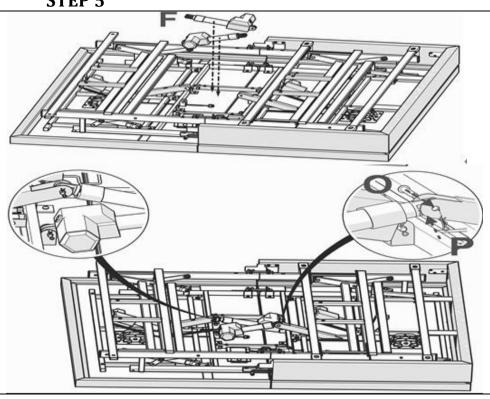


Take out 8\*Wing Bolts (T), 8\* Spring Washers (V) and 4\* U-shaped Brackets (U) from your accessory box.

Insert each Wing Bolt (T) through each Spring Washers (V) and the each hole of U-shaped Brackets (U), as shown in the picture.

Securely tighten these components and each junction ( two junctions on the left side and two junctions on the right side) by twisting 8\* Wing Bolts(T).

#### STEP 5



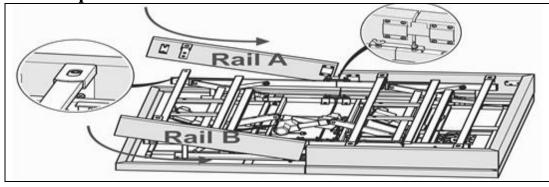
Take out Head Motor and Foot Motor(F), 4\*Cotter Pins(P) and 4\*Clevis Pins (O) from your accessory box.

Respectively allocate Head Motor and Foot Motor (F) into their corresponding brackets on your Adjustable Base

Insert each Cotter Pins (P) into the holes on each Clevis Pins (O), as shown in the picture.

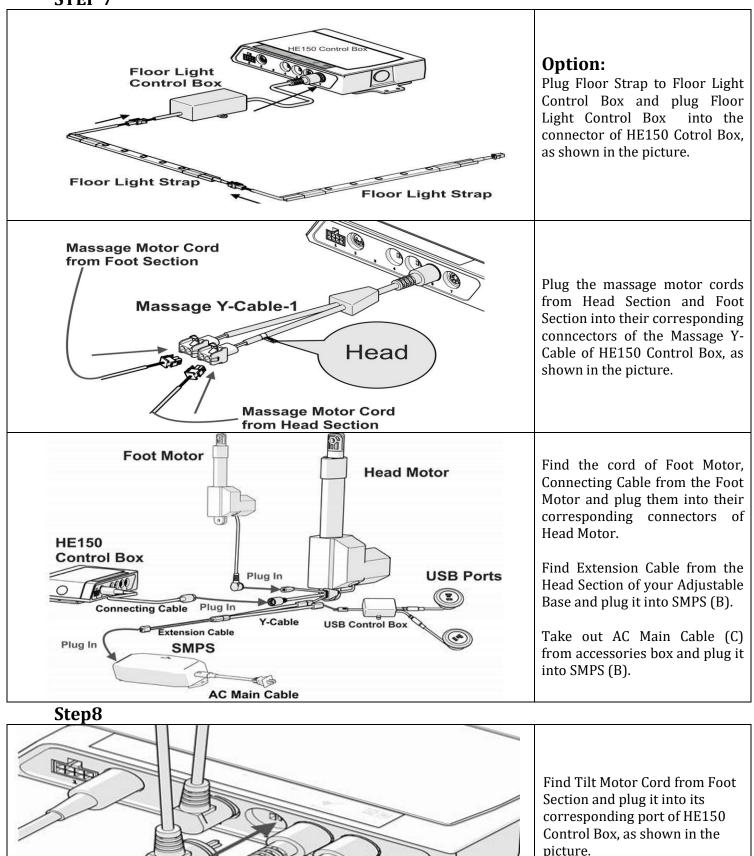
Make sure Head Motor and Foot Motor(F) are installed properly.

#### Step6

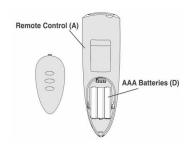


Follow the instruction, shown in th picture, to install Rail A and Rail B.

Tilt Motor Cord from Foot Section



Insert three AAA Batteries (D) into the compartment of the Remote Control (A).

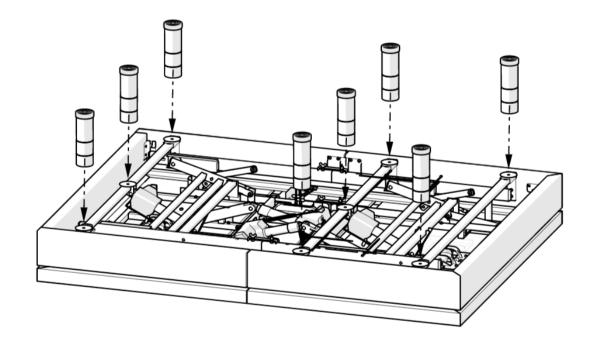


#### **STEP 10**

Take out 8\*Support Legs(E) from the accessories box.

You have adjustable height choices and can use any of or three all leg height choices of 5", 2-1/2",2".

Once the height is determined, securely tighten the legs onto your Adjustable Base and leave no gap between leg and base.



#### **STEP 11**

Carefully flip over your topside down Adjustable Base. Lift up the Base to desired location.

#### **IMPORTANT NOTE:**

Be Careful when flipping your Base:

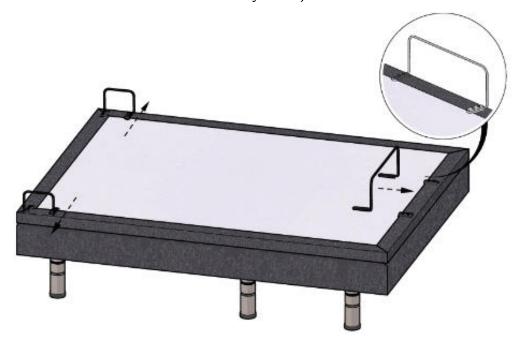
The installed legs could get damaged or bent by excessive pressure, if you lean your Adjustable Base on the legs.

- 1. Do not recline the Base against the installed legs to flip it over.
- 2. Do not drag the Base across the floor.

#### **STEP 12**

Plug the AC Main Cable (C) in an electrical outlet with 100-240V, 50/60 Hz. A surge protector (not included) is recommended for longer life of your Adjustable Base.

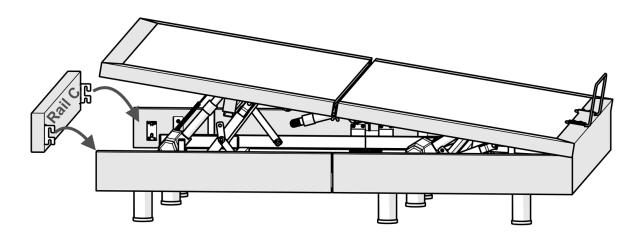
Take out 1\*Retainer (M) and 2\*Side Retainers (X). Insert the retainers into the corresponding holes on the Retainer Bar Fixation at the bedside and the foot of your adjustable base.



#### STEP14

#### **Scenario 1: Not Installing Headboard**

Tilt your Adjustable Base by using Remote Control (A) and hook up the Rail C onto your Adjustable Base, referring to the following picture.



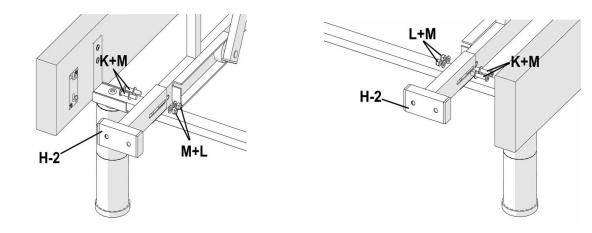
#### Scenario 2: Installing Headboard

Raise the Backrest by using Remote Control (A) and remove the Head Rail.

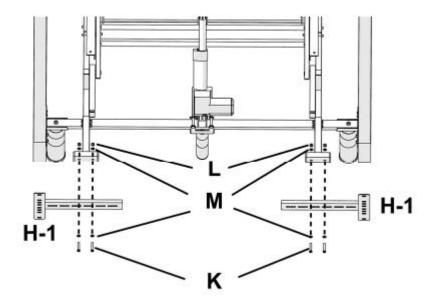
Take out the Wrench (J), two Bolts (K), two Washers (M) and two Nuts (L) from the accessories box. Refer to the following picture. Place the Headboard Bracket (H-2) on the tube of the right hand side of your Adjustable Base. Insert the Bolt (K) with its Washer (M) through the pre-drilled holes on the Bracket (H-2) and the tube.

Fasten the two Bolts (K) with the two Washers (M) and the two Nuts (L) with the two Washers (M) by using the Wrench (J).

Redo this step on the left hand side of your Adjustable Base.



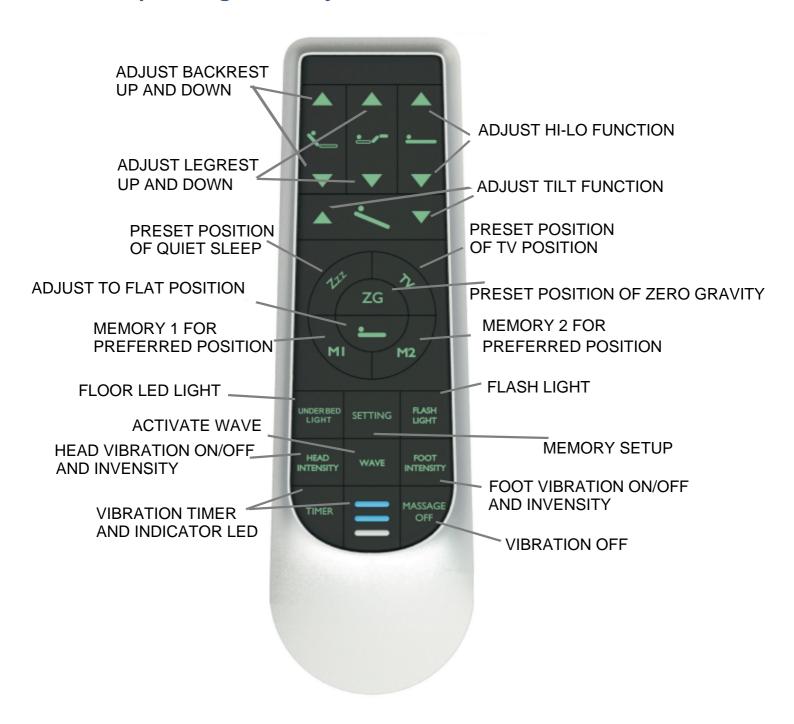
The Bracket (H-1) allows adjustment to meet the dimension of user's Headboard (not included). After choosing desired pre-drilled holes on the H-1 Bracket, pass the Bolts (K) with the Washers (M) through the holes on H 1 and H 2 Brackets. Fasten these Bolts (K), Washers (M) and Nuts (L) by using the Wrench (J).



#### **Step 15**

Now place your mattress on your Adjustable Base. All the installation procedures have been completed.

# **Operating Your Adjustable Base**



Α



Press and hold the button to RAISE or LOWER BACK REST. Stops when released.

В.



Press and hold the button to RAISE or LOWER LEG REST. Stops when released.

 $\mathbf{C}$ 



Press and hold the button to RAISE or LOWER the BED. Stops when released.

D,



Press and hold the button to TILT the BED. Stops when released.

E.



Click the button to automatically adjust user's bed to zero gravity position. Stops by clicking any button.

F



Click the button to automatically adjust user's bed to FLAT position. Stops by clicking any button.

G



Click the button to automatically adjust user's bed to the Memory 1 position preset by user. Stops by clicking any button.

Η.



Click the button to automatically adjust user's bed to the Memory 2 position preset by user. Stops by clicking any button.

Ι.



Click the button to automatically adjust user's bed to have QUIET SLEEP position. Stops by clicking any button.

J.



Click the button to automatically adjust user's bed to have WATCHING TV position. Stops by clicking any button.

K.



Click the button to turn on the FLASHLIGHT on the remote control or click to turn it off. The FLASHLIGHT will stay on as long as the button is pressed. After releasing the button, the FLASHLIGHT will stay on for several seconds then turn off simultaneously when the backlight turns off.



Click the button to turn on the FLOOR LED LIGHT or push to turn it off. FLOORLED LIGHT will stay on for five minutes if the button is not clicked again.

Μ.



\* Click the button to turn On/ Off the HEAD VIBRATOR.

The head massage motor will start from strongest vibration, click again to adjust the four levels INTENSITY of HEAD VIBRATOR. STRONG→MEDIUM→WEAK→NONE→STRONG→MEDIUM....

\* Click the button to stop and save the intensity status when you exit for the next activation.

N.



\* Click the button to turn On/Off the FOOT VIBRATOR.

The foot massage motor will start from strongest vibration, click again to adjust the four levels INTENSITY of FOOT VIBRATOR. STRONG→MEDIUM→WEAK→NONE→STRONG→MEDIUM....

\* Click the button to stop and save the intensity status when you exit for the next activation.



\* Click the button to turn On/ Off the WAVE MODE VIBRATOR.

The wave mode will start from strongest vibration, click again to adjust the four levels INTENSITY of FOOT VIBRATOR.

STRONG→MEDIUM→WEAK→NONE→STRONG→MEDIUM....

\* Click the button to stop and save the intensity status when you exit for the next activation.

Ο. MASSAGE OFF

Click the button to STOP ALL MOVES, including the actuators and massage vibrators.

R



Click the button to set up the time periods of vibration.



Blue LED on the handset will turn on for responding your selection. Highest is 10 minutes, Middle is 20 minutes and Lowest is 30 minutes

If start the vibration without setting TIMER, default time will be 10 minutes and the Highest LED will turn on.

When the vibration is active, click TIMER again can stop the vibration.

#### **Preset Memory Position**



Step 2: Adjust the Head and Foot position to a desired position.

Step 3: Press and hold until backlight of handset blink twice.

Step 4: Release and click or . The control box will response with Beep sound and floor light will blink twice which indicate the memory learning has completed successfully.

Step 5: To reset preprogrammed position, following Step1 to Step 3, then press

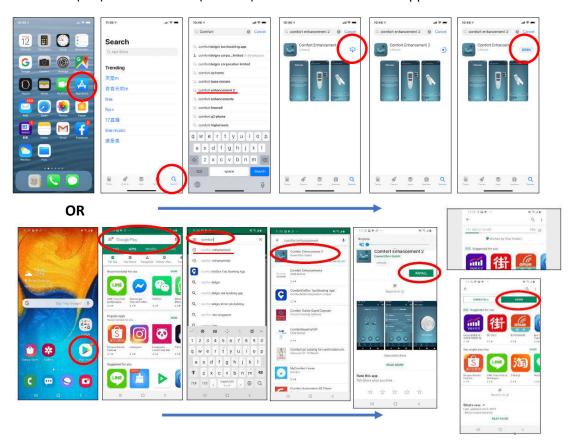


Step 6: To default all, press and hold and simultaneously until system response with Beep sound.

#### **Bluetooth and APP**

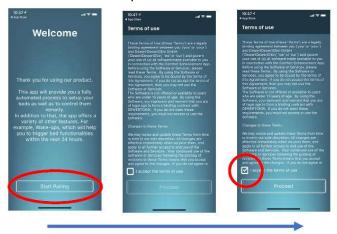
#### STEP 1

Go to the APPLE STORE (iOS) or PLAY STORE (Android) to download and install App Comfort Enhancement 2.



#### STEP 2

Click 'START PAIRING' and agree the 'TERMS of USE' by tick below.



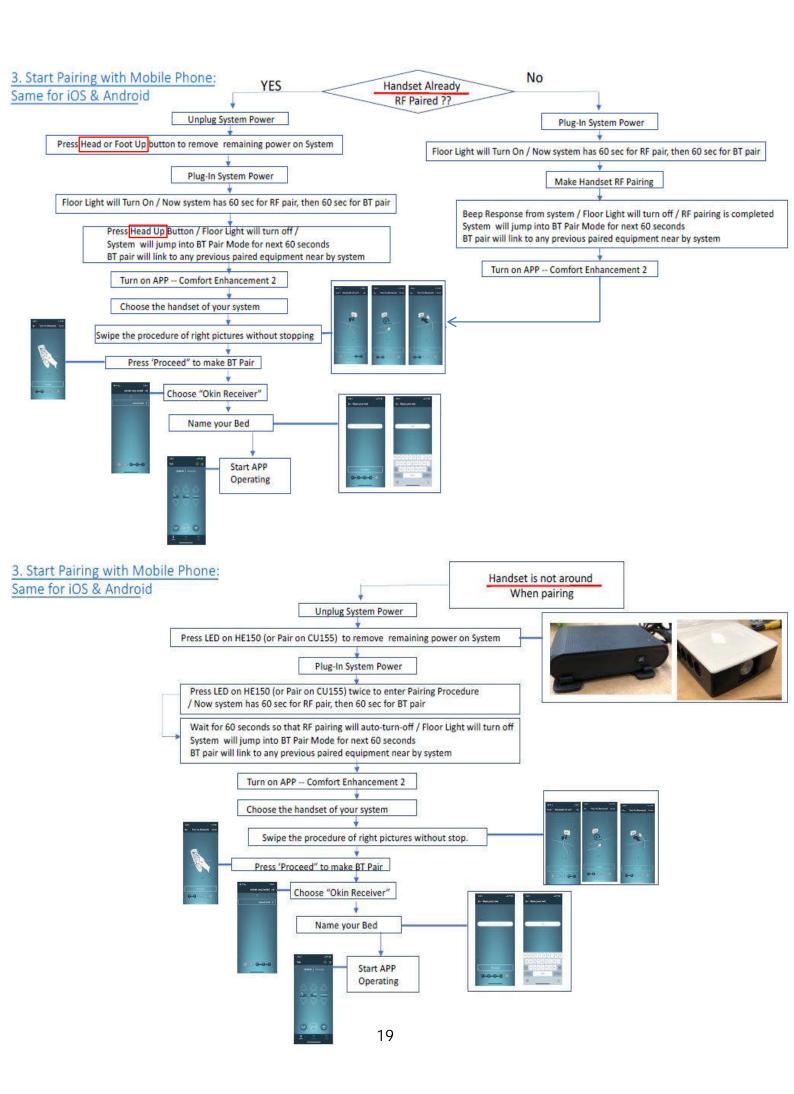
#### STEP 3

The Control Box is equipped with RF & Bluetooth control inside. Therefore, the Control Box will make RF pairing with handset first, then Bluetooth pairing be the next when you start pairing.

There will be the following Scenarios:

- 1. Handset & Mobile are both not yet paired.
- 2. Handset is paired. Mobile is not yet paired.
- 3. Handset is not around you. You want to use mobile phone to control your adjustable bed.

For all above situation, please follow the procedures as following page.



The APP will check your firmware & type of control box to decide if the 'Wake Up' function is available in APP.

The rules of acting 'Wake Up' list as following:

- 1. For HE150 (92253&later version) Function is available no matter what handset you choose.
- 2. For HE150 (89914&others) Function is NOT available → Contact your supplier for changing into higher level HE150 Control Box.
- 3. For HE150 (91881) APP(iOS) will update control box into HE150 (92253) → Contact your supplier for Update procedure instructions / Search 'HE150 Update via APP' through Youtube for details / Contact your supplier for replacing HE150 (92253). APP(Android) will not provide update via APP procedure → Contact your supplier for proper update procedure.
- 4. For CU155 Controller Function is NOT available → Use HE150(92253 or later version) if needed.



#### STEP 5

After reading your firmware version, the APP will show corresponding page which meets with the handset you selected at previous page.

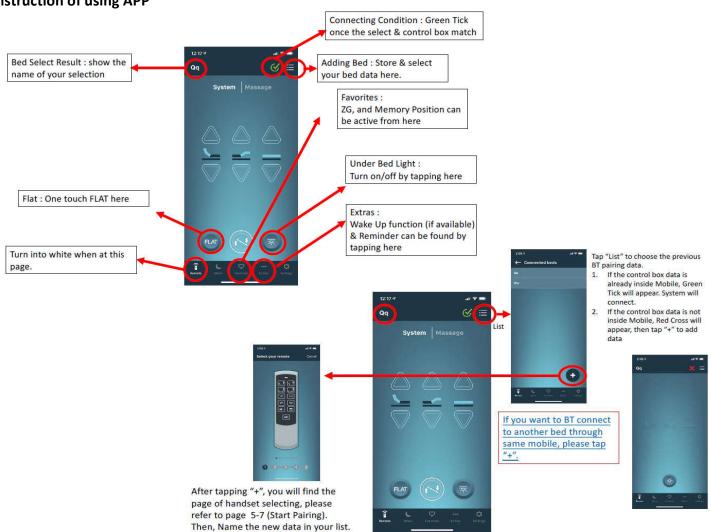




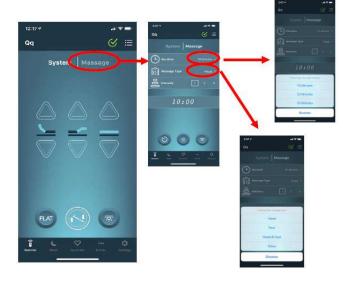


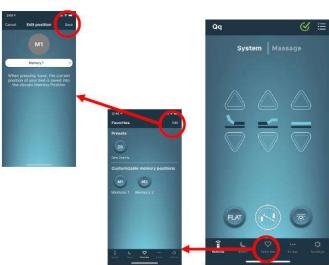




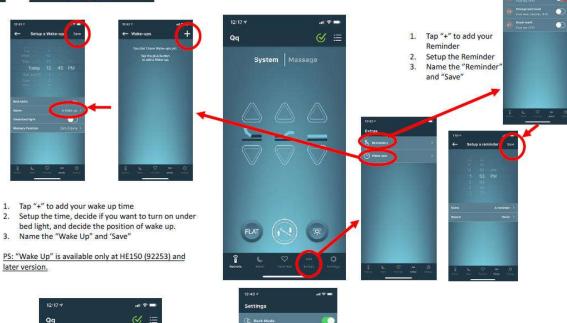


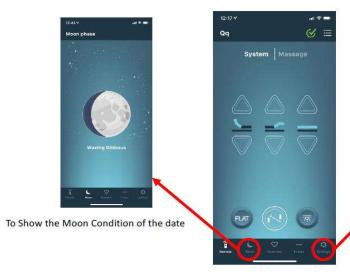
You can setup Duration, Massage Type and Intensity at massage function.





- Tap "Favorite", enter this page, and move the bed into presetting and Memory position.
- Tap "Edit", you can edit the Memory 1 / Memory 2 and name the memory. Tap Save to have the new memory name & data.
- 3. Preset Position (ZG & others) cannot be changed at APP.





To allow adjustment of the setting and show Terms of Use

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#### Wireless pairing operation

Make sure the Control Box is properly connected to the Motor.

Click the pairing button TWICE until the LED turns on. Now you have 60 seconds for pairing process. Press and

hold simultaneously and buttons on the Remote (A) until its LED Flashing & System response with beep. Please repeat all the above steps if the pairing operation failed.

\*If the Radio Frequency(RF) of handset is interfered by others electronics nearby, re-plug the electrical power will help changing into a new RF and operate again.



#### **Important Notes:**

For pairing the distance between the Remote (A) and the Control Box should be less than 2 meters.

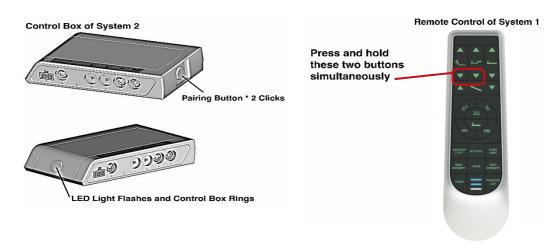
- P.S. Led Floor Light will turn on & enter in RF pairing mode when
- 1. Double Click Pairing Button
- 2. Plug CU155 into motor after long time lost electrical power

If the handset is already paired, under re-plug electrical power, even though LED Floor Light is on, it will turn off when pressing handset.

## Synchronization of two bases\_ Wireless Pairing (Option)

After completion of the pairing the 1st system, click the pairing button TWICE on the control box of the 2nd system.

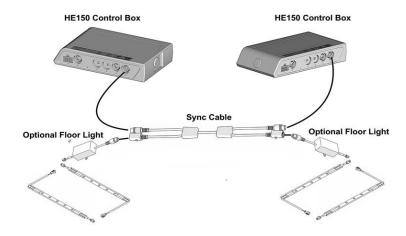
Press and hold simultaneously and buttons on the Remote of the 1st system until its LED glows continuously. Now the Remote of the 1st system allows the parallel operation.



#### Synchronization of two bases\_ Wired Pairing (Option)

If wireless pairing does not work, you may try using the sync cable.

- 1. If your beds are equipped with external floor lights, please unplug the Floor Light Control Box from HE150 Control Box of your first Adjustable Base and repeat it on your second Adjustable Base.
- 2. Insert one male end of Sync Cable into HE150 Control Box of your first Adjustable Base. Insert the other male end of Sync Cable into HE150 Control Box of your second Adjustable Base.
- 3. Insert the Floor Light Control Boxes of your first Adjustable Base to the female end of the Synch Cable and repeat it on your second Adjustable Base.



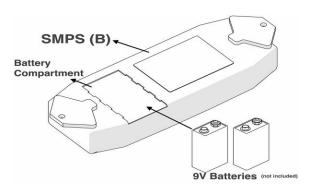
NOTE: If using both Remotes at the same time, both of two bases will not be operated until one of the Remotes' buttons are not being pressed at the same time.

#### Power outage or failure of remote control

In the case of failure of the Remote Control, press and hold the Emergency Button on the HE150 Control Box to flatten your Adjustable Base. When releasing the Emergency Button, all movement will stop immediately.



In the case of the power outage, insert two 9V Batteries (not included) to the Battery Compartment on the backside of SMPS. It can be used as the backup power. It is only for flatting the Base without load. Do not to use the Massage Vibrators when using the backup power.



# **Troubleshooting**

TROUBLE	SOLUTION
There is no feature of the base	Remote control illuminates
that can be activated.	<ul> <li>Reset the electronic components by unplugging your base for 30 seconds. Re-plug it into the power outlet.</li> <li>Ensure the surge protection or the power outlet is working. Test it by plugging in another working electronic appliance.</li> <li>The unworked power outlet may be led by the tripped electrical circuit breaker. Check the box of electrical service breaker.</li> <li>Re-pair the remote control (see Wireless pairing operation).</li> <li>Remote control does not illuminate</li> <li>Replace batteries in the remote control.</li> <li>Install 3 AAA batteries correctly.</li> </ul>
The base cannot return to the	Ensure the base is not obstructed. Remove the
flat position.	obstruction.
-	<ul> <li>Ensure there is a sufficient space between the wall or headboard and the edge of the mattress. The insufficient space may obstruct the movement of the base.</li> </ul>
Excessive noise of massage function.	<ul> <li>Place carpet pieces or soft material beneath each leg of the base.</li> </ul>
	<ul> <li>If headboard is equipped ensure the hardware of the headboard brackets are tightened firmly.</li> </ul>
	<ul> <li>Ensure the base stands clear of walls, nightstands or other objects.</li> </ul>
Minor interference with lifts functions.	<ul> <li>Replace batteries in remote control if necessary.</li> <li>Ensure you're operating within 10% duty cycle (see Restrictions of your adjustable base).</li> <li>Press the adjust buttons squarely and accurately.</li> <li>Control box may be subject to the common radio frequency from other devices. Reprogram the remote control and the control box on a different radio frequency if necessary (see Wireless pairing operation).</li> </ul>
USB ports do not charge electronic gadgets.	<ul> <li>Try another well-working USB cable.</li> <li>Unplug all USB cables for 10 minutes to reset and try it again.</li> </ul>

### 20 YEAR LIMITED WARRANTY

Your New Adjustable Base has a 20 Year Limited Warranty, subject to the terms and conditions set fourth herein.

The Purchaser must show original proof of purchase for Warranty to be valid.

The decision for repair or replacement of defective parts under this limited warranty is the option and sole discretion of the manufacturer.

#### Year-1: Full Coverage of Parts and Labor

This adjustable base is warranted by the manufacturer against defects and workmanship for a period of one year from the date of purchase.

During this time, the manufacturer will repair or replace, at no cost to the original purchaser, any warranted parts found to be defective by the manufacturer.

#### **Year 2 - 3: Full Coverage of Parts Only**

During 2 through 3 years from the original purchase date, the manufacturer will offer replacement parts for any defective adjustable base parts determined by the manufacturer to be defective.

The manufacturer's liability is limited to the replacement of the defective electrical and mechanical parts only.

The purchaser shall bear all transportation costs for parts and installation labor related to the delivery and replacement of the defective parts.

#### Year 4 - 20: Full Coverage of Mechanical Parts Replacement

During 4 through 20 years, the manufacturer will offer mechanical replacement parts for any mechanical base part to be found defective at 1/16 of the current replacement parts multiplied by the number of years from the original purchase date.

The manufacturer's liability is limited to the replacement of the defective mechanical parts only. This does not apply to the fabrics, electrical components, lift motors, massage motors or wood components.

The purchaser shall bear all transportation costs for parts and installation labor related to the delivery and replacement of the defective part.

#### **Additional Terms and Conditions:**

This warranty is void and does not apply:

- To any damaged caused by user
- If damaged occurred during transit or mishandled
- Subjected to physical or electrical abuse or misuse
- Exceeded the Load Capacity recommended by the manufacturer in your Owner's Manual

Repair or replacement of adjustable base parts will be the sole remedy of the purchaser. There shall be no liability on the part of the manufacturer and their respective parents, subsidiaries, divisions or affiliates for any special, indirect, incidental or consequential damages or other damages, claim or loss not expressly covered by terms of this Limited Warranty.

For further assistance, please contact the dealer you purchased your Adjustable Base from.