



## **Contents**

1.	Introduction	2
2.	Specifications	2
3.	Reference Views	3
4.	Assembly Reference	4
5.	Assembly Guide	5-16
6.	Read Before Riding	17
7.	Pre-ride Checklist	18
8.	Precautions & Warnings	19
9.	Motor	20
10.	Display	21
11.	Bafang Display User Guide	22-35
12.	Battery	36-40
13.	Charger	41-42
14.	Bluetooth App Manual	43-47

### **Introduction**

#### **CONGRATULATIONS!**

Congratulations and welcome to the Sun Seeker Recumbent family! You have selected one of the most comfortable and advanced recumbents on the market. Please read this manual before riding your Sun Seeker Recumbent. In this manual you will find that we cover the basics for setting up and understanding your new recumbent.

#### **IMPORTANT:**

This manual is only a supplement to the main Recumbent Bicycle/Tricycle Owner's Manual. Please read it before you take the first ride on your new recumbent bicycle/tricycle, and keep it for reference.

#### NOTE:

This manual is not intended as a comprehensive use, service, repair, or maintenance manual. Please see your dealer for all service, repairs or maintenance. Your dealer may also be able to refer you to classes, clinics or books on bicycle use, service, repair, or maintenance.

Model:	e-FAT TAD
Style:	Tadpole Electric Assist Trike
Frame:	Tig Welded Chromoly with Rear Coil Over Suspension
Fork:	High Tensile Steel with Integrated Suspension
Handlebar:	Chromoly Steel
Steering System:	Direct Linkage
Seat:	1-piece – Padded Base w/Alloy Frame & Full Mesh
Wheelbase:	59" (150cm)
Overall Length:	78 – 83-1/2" (198 – 212cm)
Width:	33-1/4" (92cm)
Bottom Bracket Height:	20 – 21-1/2" (51 – 55cm)
Seat Height:	16-1/2 – 17-3/4" (42 – 45cm)
Weight:	85 lbs.
X-Seam:	37 – 50-1/2" (94 – 128cm)
Weight Limit:	300 lbs.
Gear Inch Range:	15 – 88"
Headset:	Sealed Mechanism Steel
Grips:	EVA Foam w/Lock Ring
Pedals:	Wellgo Platform
Crankset:	Triple Alloy 170mm 42/32/22T
Bottom Bracket:	Sealed Cartridge w/Speed Sensor
Chain:	KMC 1/2" x 3/32"
Front Derailleur:	Sunrace Dual Pull
Rear Derailleur:	Sunrace
Freewheel:	Sunrace 11-34T 8-speed
Shifter Levers:	Sunrace Alloy
Rear Motor:	Bafang 48V/500W
Battery:	SEGL Battery 48V/10.4Ah, w/BMS, & Bluetooth
Battery Carrier:	Alloy Rear Battery Type
Charger:	DC 48V, 6V/2A
Display:	Bafang DP C11.UART
Controller:	Bafang 48V/500W
Brake Sensor:	King Meter HWBS-3
Brake Levers:	Promax Alloy Locking Linear Pull
Brake Caliper:	Promax Mechanical Disc
Front Hub:	Alloy 13Gx36H
Rims / Spokes:	Alloy Fat Single Wall / 13G Stainless Steel
Tires / Size:	CST Fat Bike / 20"x4.0"
Water Bottle Cage Mount:	2-Handlebar / 2-Seat Back
	Note: Specifications subject to change without notice.
	<ul> <li>Boom modification may be required from 37" –40"</li> </ul>

#### e-FAT TAD Specifications

## e-FAT TAD Overview





## e-FAT TAD Assembly Reference



	e-FAT TAD Parts List	
ITEM	DESCRIPTION	QTY
1	Main Frame Assembly	1
2	Crank Boom Assembly	1
3	Right Front Wheel Assembly	1
4	Left Front Wheel Assembly	1
5	Rear Wheel Assembly	1
6	Headset Seal	4
7	Headset Bearing	4
8	Headset Adjust Cone	2
9	Headset Compression Ring	2
10	Headset Spacer 10mm	6
11	Headset Top Cap & Bolt	2
12	Right Handlebar Assembly	1
13	Left Handlebar Assembly	1
14	Steering Linkage Assembly	1
15	Seat Frame Assembly	1
16	Bolt for Seat Frame (M8x110mm)	1
17	Quick Release Seat Pins	2
18	Seat Mesh (Not Pictured Above)	1
19	Upper Seat Strut (16.0x150mm)	2
20	Lower Seat Strut (19.1x220mm)	2
21	Seat Strut Pin	2
22	Seat Strut Hardware Set with Half-Moon Nylon Washers (Not Pictured Above)	1 Set
23	Battery Carrier with Battery & Controller	1
24	Rear Derailleur	1
25	Idler Pulley Assembly	1
26	Chain & Chain Tube Assembly	1
27	Pedals (9/16")	1 Pair

#### Front Wheel and Handlebar Installation

Install #6 Headset Seal and #7 Headset Bearing (after lubricating bearing with grease) onto steer tube of the #3 Right Front Wheel Assembly. Insert steer tube into right-hand head tube. See Figure A.

Install #7 Bearing (after lubricating bearing with grease,) #6 Headset Seal, #8 Headset Adjust Cone, #9 Headset Compression Ring and two (2) #10 Headset Spacers onto the steer tube. See Figure B.

Install #12 Right Handlebar Assembly onto the remaining top portion of steer tube of #3 Right Front Wheel Assembly. Install #10 Headset Spacer and #11 Headset Top Cap and Bolt as shown in Figure B.

Install #13 Left Handlebar Assembly follow above procedure using the Left Handlebar Assembly.





#### **Rear Wheel and Rear Derailleur Installation**

Install #5 Rear Wheel Assembly into the rear frame drop outs. Be careful not to pinch wire on left side of axle. Tighten nuts securely. See Figure C.

Install #24 Rear Derailleur onto the rear frame derailleur tab. See Figure D.



#### **Steering Linkage Installation**

Install #14 Steering Linkage Assembly, using supplied hardware, into the inboard Steering Arm Tab holes (closest to rider.) See Figure E.



#### **Setting Front Wheel Toe-In Angle**

With the trike on the ground and wheels fixed in the straight ahead position, measure from the front of the left wheel centerline across to the front of the right wheel centerline. Record that measurement. See Figure F.

Repeat the above for the rear left wheel centerline across to the rear right wheel centerline. Record that measurement. The measurement should be the same or up to 3mm greater than the front centerline. (0mm to 3mm recommended) See Figure G.

Hint for a simple measuring technique: Use a tape measure and hook one end on an inside spoke at the centerline of the left front wheel and measure to the opposing inside spoke on the front of the right hand wheel. Use the same technique at the rear. To adjust the toe in, loosen the Rod End Jam Nuts on the #14 Steering Linkage Assembly. See Figure G.1. Turn the Steering Linkage Assembly clockwise or counter clockwise. This will lengthen or shorten the rod since the rod ends are right hand threaded on one side and left hand threaded on the other. Tighten the Rod End Jam Nuts and recheck the wheel toe-in. Readjust if necessary.



### **Crank Boom Installation**

Connect 6-Pin cable with black connectors. Install #2 Crank Boom Assembly into the front of the frame. For now, insert midway and secure crank boom bolts. See Figure H.



NOTE: DO NOT extend #2 Crank Boom Assembly past the safety line marked clearly on the boom. See Figure I.



#### **Idler Pulley Installation**

Install #25 Idler Pulley Assembly as shown. See Figure J.



#### **Chain Tube Installation**

Mount #26 Chain Tube Assembly with longer tube above the front axle and shorter one below the axle. See Figure K.

Also make sure the "Y" spring brackets are pointed toward the rear of the trike.



#### **Chain Installation**

Route chain through front derailleur and then into the #26 Chain Tube Assembly, then pull just enough chain out of #26 Chain Tube Assembly to go around chain ring. See Figure L & M.



Route the chain over and under the idler pulleys, around the freewheel and through the rear derailleur. See Figure N & N.1



**NOTE:** Chain length is set for crank boom at its fully extended position. Chain and chain tubes may have to be shortened as necessary. Do not shorten until the rider has been fitted properly.

**NOTE:** Adjust the chain tubes to be far enough from the crank to not affect shifting.

#### **Battery Carrier Installation**

Remove the pre-installed screws out of the frame, assemble the #23 Battery Carrier on the frame. See Figure O.



### Cable Routing, Brake

Connect the right/left brake cables to the right/left brake calipers. See Figure P, Q.



#### Cable Routing, Front Derailleur

Route the cable from left shift lever through the guides on the bottom of the frame, connect the cable on front derailleur, with about 50mm cable reserved. Cut the excess cable, clamp on a ferrule. See Figure R.



### Cable Routing, Rear Derailleur

Route the cable from right shift lever through the guides on the bottom of the frame, connect the cable on rear derailleur, with about 50mm cable reserved. Cut the excess cable, clamp on a ferrule. See Figure S.



#### **Electrical Connections**



#### **Pedal Installation**

Apply grease to the threads of the #27 Pedals. This will protect both the threads of the pedal and the crank arm over time. Use pedal washers where required.

Using your hands, thread the #27 Pedals (marked for L or R) into the respective left or right crank arms by turning them toward the front of the bike.

Once the threads catch, use your pedal wrench to finish tightening down the pedals. See Figure U. Tighten the pedals to a minimum of 300 in-lbs. of torque.



#### Seat Frame and Seat Strut Installation

Install #16 M8x110 Bolt through set of holes toward the back of #1 Main Frame and secure with nut provided. See Figure W. Install #15 Seat Frame Assembly onto M8x110 Bolt and secure with #17 Quick Release Seat Pins. See Figure W. Install two #19 Upper Seat Struts and four (4) ½ moon washers with bolts nuts and washers to the seat frame. See Figure X & Y. Install two #20 Lower Seat Struts to the rear mounting tabs using the provided hardware. Insert the lower struts into the upper struts and use two Seat Strut Pins to secure the struts. See Figure Y.



### **Crank Boom Adjustment**

Loosen the #2 Crank Boom Assembly clamp bolts and position the boom so that when seated, your knee is slightly bent when the forward foot is in the farthest pedaling position. See Figure a.



#### Seat Adjustment

The goal is for your seat (and therefore your weight) to be as far back as possible when your setup is complete. Adjust the seat angle by removing the #21 Seat Strut Pins and sliding the seat struts into a new position if necessary. Reinstall #21 Seat Strut Pins after adjustment. See Figure b.



#### Handlebar and Headset Adjustment

Loosen the clamp bolts that secure your #12 Right Handlebar Assembly to the steer tube then carefully loosen the #11 Headset Top Cap & Bolt. See Figure c. Rotate the #12 Right Handlebar Assembly to the desired fit position then carefully retighten the #11 Headset Top Cap and Bolt only until play is removed from headset bearing assembly and the #3 Right Front Wheel Assembly still turns smoothly. Do not over tighten bearing assembly. Tighten clamp bolts on #12 Right Handlebar Assembly until secure. Repeat adjustments for #13 Left Handlebar Assembly. Recheck handlebar and headset adjustments after a short test ride.



**WARNING:** Make sure that once you have made all your handlebar adjustments, you have sufficient clearance from your hands to your tires or wheels and that control cables are secured away from all moving parts. Failure to do so may result in loss of control resulting in a serious or fatal accident.

### PLEASE READ THIS BEFORE RIDING YOUR SUN SEEKER RECUMBENT

This manual is intended to be read carefully so that you may enjoy your new recumbent and be an informed rider aware of the benefits as well as the warnings and safety issues in riding this recumbent.

A recumbent trike is not a bicycle and this manual contains specific information and warnings that will let you enjoy your Sun Seeker Recumbent Trike in comfort and safety.

Tricycling is a sport, and a mode of transportation. With it comes the risk of an accident that could result in injury and even death. By riding this recumbent, you assume that risk.

We want to give you as much information as possible to make you a safer rider. We cannot cover all contingencies, but we can make you more aware and informed. Be aware that:

- Municipal bicycle regulations also apply to recumbents. Most states and municipalities have bike regulations. It's up to you to research those regulations and become informed. Your local dealer will be able to help you with this information. Since you will be sharing the road at times with other vehicles, a good rule to follow is "If you can't do it with a bicycle, don't do it with a recumbent".
- A recumbent trike's widest point could be behind you at the rear wheels. If the front goes by an obstacle there is no guarantee that the rear wheels will also clear. When riding, you must give clearance to the edge of the road or sidewalk. Give extra room when passing near pedestrians and obstacles. Stay clear of potholes and be aware that you can lose control if any wheels should drop into a hole or catch an immobile object.

Always ride defensively and watch out for the unexpected. This means everything from cars to kids, pets, and rough or hazardous road surfaces. Be prepared to avoid danger and ALWAYS WEAR A BICYCLE HELMET. We recommend buying your helmet from a local dealer that can fit and instruct you on the correct way to wear this helmet. Protecting your head is your primary safety responsibility.

Always wear a CPSC, ANZI, ASTMS, or SNELL approved bicycle helmet. CPSC approval is the new U.S. Federal Standard to which all helmets must comply.

## PRE-RIDE CHECKLIST

- 1. Check your tires for proper air pressure. Keep tire pressure between the minimum and maximum air pressure rating printed on the tire sidewall. Do not inflate over the maximum air pressure rating on the tire sidewall.
- 2. Test your brakes and make sure they stop the recumbent. If you have any doubts, do not ride, and see your dealer for service.
- 3. Check that the handlebar is tight and that the ends are plugged. Check the saddle for tightness.
- 4. Move the recumbent forward and back. If you hear or feel any resistance, do not ride.

If you feel that something is not right after performing your check, DO NOT RIDE. Take your recumbent to your local dealer for inspection.

## PRECAUTIONS AND WARNINGS

A recumbent trike does not handle like a bicycle. You cannot lean into a turn. Turns must be made more carefully and at a slower speed than a bicycle.

All wheels must be on the ground at all times. Do not make sudden changes in direction that could unbalance the recumbent and cause an accident.

When beginning to ride, stay at a slow speed. You must acclimate yourself to handling and turning this recumbent. If you feel insecure, slow down and proceed at a slower pace. With practice, you will become comfortable riding and stopping.

The ability to climb hills on this electric recumbent will depend on the grade, rider weight, pedal input, and momentum. It is not advised to rely solely on the motor assist. Best results will come from a combination of motor and pedal assist.

**Tipping hazard**. Turning sharply or turning at speeds above 5 mph can cause the recumbent to become unbalanced and tip over resulting in possible injury or death.

For your safety, the maximum power-assisted speed of this recumbent is limited to 20 MPH.

Keep both hands on the handlebars at all times. Riding with no hands can cause the recumbent to become unstable and tip over, resulting in possible injury or death.

We recommend that you not ride at night or at times of reduced visibility.

If you must ride at night or during reduced visibility, you must outfit your recumbent with a white front light and red rear light. Relying on reflectors is not adequate protection. Most municipalities require lights for night riding. Your local bicycle dealer can help you in selecting the right lighting system for your needs.

### INTENDED FOR RIDERS 13 YEARS OF AGE OR OLDER.

# MAXIMUM WEIGHT LIMIT FOR RIDER AND CARGO COMBINED IS 300 LBS.

## MOTOR

Brand: Bafang Model: RM G060.500 Gear Drive Rear Hub Motor Rated Voltage: 48V DC Rated Power: 500W Efficiency: (%):  $\geq$  80 Noise Grade: < 55 dB Water Resistance Rating: IP 65 Operating Temperature Range: -4°F – 113°F Weight: 9.5 lbs



## **DISPLAY**

Brand: Bafang

Model: DP C11.UART left side e-bike display

Rated Voltage: 48V DC

Communication: UART

Water Resistance Rating: IP 65

Certificates: CE / EN 15194 / REACH / ROHS

Operating Temperature Range: -4°F - 113°F

FEATURES: The BAFANG HMI with a high-contrast LCD display delivers all important information at a glance and can also be read in direct sunlight without difficulty. The operating of the overall system is integrated into the HMI and does not require an additional handlebar controller. The additional output can be individually controlled by nine support levels. The user interface is clearly legible and intuitive to use. The HMI is compatible with the Bus system RS 232. The HMI is protected against contact and ingress of water and dirt and complies with protection class IP 65.

User Manual: For complete details on the operation and use of this display refer to the Bafang User Manual included in the following section.



For your safety, the maximum power assisted speed of this recumbent is limited to 20 MPH.

## **DP C11.UART**



## CONTENTS

Content	22
Introduction	23
Specifications	24
Functions overview	24
Normal indication area	25

Button definition2	26
Normal operation 26-2	28
Function settings 29-3	32
BESST connection	33
Error code definition	34

# INTRODUCTION

- · Name: Intelligent display
- Model: DP C11.UART
- Certification: EN15194 electrically power assisted cycles
- Appearance: the shell is made of PC1414 in black/white; The liquid crystal display is made of hardened PMMA, the key button is made of silicone rubber.



- I.D. Number is on the back of the display Number on the middle of display back is divided into two lines:
  - A. Top line (as below)
    - DP C11.U 1.0
    - 1 DP C11.U = BAFANG display mode
    - 2 1.0 = hardware version number
  - B. Bottom line (as below)
    - 607E1Q7280001
    - ① 607 = Wire length and connector model is 750mm M5.2

- 2 E1 = design number
- ③ Q7280001 = Production date is 28th July, 2016; SN is 0001



Content of QR code: DPC11E10101.1 PD2526051205 DP C11.U 1.0 607E1Q7280001 The first line: DPC11E10101.1 - Software version The second line: PD2526051205 - Parameter code The last two lines: DP C11.U 1.0 / 607E1Q7280001 - SN

## SPECIFICATIONS

- Rated voltage: 36V/43V/48V DC
- Rated current: 10mA
- Maximum operating current: 30mA
- When power off, leakage current: <1uA
- Operating current supplied to controller: 50mA

- Operation temperature: -20  $^\circ\!\mathrm{C}$  ~45  $^\circ\!\mathrm{C}$
- Storage temperature: -30 °C ~70 °C
- IP level: IP65
- Storage humidity: 30%-70%

## **FUNCTIONS OVERVIEW**

- Intelligent battery level indication: With an optimization algorithm, a stable display of the battery level is ensured, and the problem of fluctuant battery level indication common with other displays is avoided.
- Adjustment and indication of the powerassistance level
- Speed indication: Indicate the maximum speed and the average speed, unit can be changed between km and mile.
- Indicate the motor power
- Indicate the single riding time

- Trip distance indication: Single-trip distances, the total distance or remaining distance can be displayed.
- Walk assistance
- Indication and control of the headlight
   switch
- Indicate battery information
- Indicate consumption of energy CALORIES (Note: need the controller support the function)
- Display remaining range (Note: If the controller has the function)

# NORMAL INDICATION AREA



 Battery level indicator: Indicate the current capacity level.
 Power-assistance level indication: Indicate the current level from level 0 to level
 If no number is displayed, it means no power-assistance; no represents walk assistance mode.

- Headlight/taillight indicator: Only display when headlight/taillight is on.
- Indicate the current speed unit: km/h or MPH

**5** Multi-function indicator:

The default setting is "TRIP" (single trip distance). it can circularly switch as "TRIP" (single trip distance)  $\rightarrow$  "ODO" (total distance)  $\rightarrow$  "MAX" (maximum riding speed)  $\rightarrow$  "AVG" (average riding speed)  $\rightarrow$  "RANGE" (remaining distance)  $\rightarrow$  "POWER" (output power)  $\rightarrow$ "TIME" (riding time).

(Note: after switching on the display, within ten seconds, when detect the signal of torque sensor or detect it is the torque sensor, it display the calorie interface; if detect the remaining distance, it display the RANGE interface; or it will not display the two interface)

## **BUTTON DEFINITION**



There are three buttons for C11, including power/mode key, plus key and minus key 👩 📻 . In the following the description, power key means 🔞 key, plus key means 🖶 key, minus key means extended key.

## **NORMAL OPERATION**

"Press and hold" means press and hold for more than two seconds, briefly press means press for less than 0.5 second.

• On/off

Press and hold power key, the display starts working. Press and hold the power key again, it will turn off. When power off, the display does not consume the power from the battery, because the leakage current is less than 1uA.



# NORMAL OPERATION

#### Select power-assistance level

After starting up, briefly press the plus key or minus key to switch the power-assistance level to change the motor output power. Level 0 means no power assistance. Level 1 is lowest level and level 5 is top level. After turning on the display, the default level is level 1.



• Headlight / taillight switch

Turn on the light: press and hold the "+" key, it will turn on the backlight of display and headlight, the display will show icon for the headlight. Turn off the light: press and hold the "+" key again, it will turn off the backlight of display and headlight, and the icon for the headlight will disappear.



Walk-assist mode

Press and hold the "-" key, display will show the icon " 🛵" and the E-bike enters into walk-assist mode, release the "-" key, the icon disappear from the display and the E-bike exits walk-assist mode.



# NORMAL OPERATION

Switching functions

The default setting is "TRIP" (single trip distance). it can circularly switch as "TRIP" (single trip distance)  $\rightarrow$  "ODO"(total distance)  $\rightarrow$  "MAX"(maximum riding speed)  $\rightarrow$  "AVG"(average riding speed)  $\rightarrow$  "RANGE" (remaining distance)  $\rightarrow$  "CALORIES/CAL" (KCal)  $\rightarrow$  "POWER" (output power)  $\rightarrow$  "TIME"(riding time)  $\rightarrow$  "TRIP"(single trip distance).



• State of charge indication for battery

It displays the state of charge for battery with one to five grids. When it displays all five grids, it means the battery has full capacity. If the frame of the battery icon flickers at the frequency 1 HZ, it means battery needs to be charged immediately.

Battery icon Bars	State of charge	Icon diagram
5	75%-100%	
4	50%-75%	
3	30%-50%	
2	10%-30%	•
1	5%-10%	
LOW	<5%	•77777 FLASH

# **FUNCTION SETTINGS**

Press and hold "+" key & "-" key at the same time to enter into the menu list ("Display Setting", "Information", "EXIT"). Briefly press "+" key or "-" key to select "Display Setting", "Information" or "EXIT", and then briefly press the "power" key to select it.



Functional setting interface



"Information" interface

- 1) Display setting
- Reset the single-trip distance Enter into "Display Setting" menu and briefly press "+" key or "-" key to select "TRIP Reset" and briefly press "power" key. And then, briefly press "+" key or "-" key to select "NO"/"YES" ("YES" means reset, "NO" means no reset). Briefly press "power" key to save the setting and exit back to the "TRIP Reset". Press and hold "+" & "-" at the same time to save and exit back to main interface or select "BACK"  $\rightarrow$  "EXIT" to exit back to main interface. (note: after setting, pressing and holding "+" key and "-" key at the same time means saving setting and exiting back to main interface). When resetting the single-trip distance, it resets the riding time, average speed, maximum speed at the same time.



 Unit change between Metric and Imperial Enter into "Display Setting" menu and briefly press "+" key or "-" key to select "Unit", and then briefly press "power" key to confirm selection. Briefly press "+" key or "-" key to select "Metric"/"Imperial" and then briefly press "power" key to save the setting and exit back to "Unit". Press and hold "+" key & "-" key at the same time to exit back main interface or select "BACK"→"EXIT" to exit main interface. (note: If selecting the metric

# **FUNCTION SETTINGS**

interface, the all information will be metric; if selecting the imperial, the all information will be imperial.)



Backlight setting

Enter into "Display Setting" interface and briefly press "+" key or "-" key to select "Brightness" and then briefly press "power" key to confirm selection. Briefly press "+" key or "-" key to select as "100%"/"75%" /"50%"/"30%"/"10%". After selection, briefly press "power" key to save the setting and exit back to the "Brightness" interface. Press and hold "+" key and "-" key at the same time to exit back to main interface or select to "BACK"→"EXIT" to exit back to main interface.



• "auto off" time setting

Enter into "Display Setting" interface and briefly press "+" key or "-" to select "Auto Off" and then briefly press "power" key to confirm selection. Briefly press "+" key or "-" key to select as "OFF"/"9"/"8"/"7" /"6"/"5"/"4"/"3"/"2"/"1". After selection, briefly press "power" key to save the setting and exit back to "Auto Off" interface. Press and hold "+" key and "-" key at the same time to exit back to main interface or select "BACK"—"EXIT" to exit back to main interface.



Power-assistance mode setting Enter into "Display Setting" interface and briefly press "+" key or "-" key to select "Assist Mode" and then briefly press "power" key to confirm setting. After setting, briefly press "+" or "-" to select as "3"/"6"/"9" and then briefly press "power" key to save the setting and exit back to the "Assist Mode" interface. Press and hold "+" key and "-" key to exit back to main interface or select "BACK"→"EXIT" to exit back to main interface. The default level for the display is level 5.



## **FUNCTION SETTINGS**

- 2) Indication information introduction
- Check wheel diameter

Enter into "Information" interface and briefly press "+" key or "-" key to select "Wheel Size" and then briefly press "power" key to check the wheel size. Briefly press "power" key to exit back to "Information" interface. Press and hold "+" key and "-" key at the same time to exit back to main interface or select "BACK"—"EXIT" to exit back main interface.



· Check speed limit

Enter into "Information" interface and briefly press "+" key or "-" key to select "Speed Limit" and briefly press "power" key to check the speed limit. Briefly press "power" key again to exit back to "Information" interface. Press and hold "+" key and "-" key to exit back to main interface or select "BACK" $\rightarrow$ "EXIT" to exit back main interface.



## **FUNCTION SETTINGS**

Check record of error code
Enter into "Information" interface and briefly press "+" key or
"-" key to select
"Error Code" and briefly press "power" key to check record.

Briefly press "+" key to circularly display records of error

code for latest ten times from "E-Code0" to
"E-Code9". Briefly press "power" to exit back to "Information"

interface or press and hold "+" key and "-" key to exit back to



# **BESST CONNECTION**

 If it is successful for display to connect to BESST, the display will show: "Connected OK!".



 If the display show "Read OK!", it means it is successful for BESST tool to read information from the display. The information includes customer's number, display type, wheel size, speed limit, software version and hardware version.

Read OK
nead on
BAFANG

 If the display show "Write OK", it means it is successful for BESST Tool to reset basic data into the display. The data includes customer's number, wheel size, speed limit.



• When writing SN, if the display show "Write OK!", it means it is successful for BESST Tool to write SN into the display.



• When reading SN, if the display show "Read OK", it means it is successful for BESST Tool to read SN from the display.



• If display enters into test mode, it will switch to normal operation interface.



## **ERROR CODE DEFINITION**

6

DP C11.UART display can show e-bike faults. When a fault is detected, the icon **Y** will be displayed. One of the following error codes will be displayed.

Error code	Error definition	Trouble-shooting
"07"	High voltage protection	Check battery voltage
"08"	Fault with motor hall sensor inside	Check the motor module
"10"	The controller temperature reaches to the top protection value	Check the controller
"12"	Fault with current sensor inside controller	Check the controller
"13"	Fault with temperature sensor inside battery	Check the battery
"21"	Fault with wheel speed detecting sensor	Check the installation position of speed sensor
"22"	BMS communication fault	Replace the battery
"30"	Communication fault	Check the controller connection

### SPECIFICATIONS

Brand: SEGL Cell Type: Lithium Polymer Rated Capacity: 10.4 Ah Rated Energy: 499 Wh Rated Voltage: 48V DC Operating Temperature: -20°C~60°C (-4°F~140°F) Charge Temperature: 0°C~45°C (32°F~113°F) Storage Temperature: 0°C~40°C (32°F~104°F) Storage Humidity: <60% Dust/Water-proof rating: IP63 Weight: 7.7 LBS

### **COMPONENTS**

- 1. Battery Pack
- 2. Charging Port & Cover
- 3. Charging Indicator
- 4. Power On/Off
- 5. Battery Lock

WARNING! Do not leave key in battery lock during use. Key will fall out and be lost. WARNING! This recumbent is designed for use only with 48V 10.4Ah battery. Use of any other battery will void warranty.



### Important notice

The operating temperature ranges for the battery are given below.

Do not use the battery in temperatures outside these ranges. If the battery is used or stored in temperature outside these ranges, fire, injury or problems with operation may occur.

- During charging: 0 °C ~ 45 °C
- During discharge: -20 °C ~ 60 °C
- Store the battery in a safe place out of the reach of children and pets.
- If you are not riding your recumbent for a long period of time, please store it with more than 60% battery power. In addition, please pay attention to charging once every 3 months to avoid completely draining the battery.
- Do not insert or remove the plug while it is wet. If this is not observed, electric shocks may result. If there is water leaking out of the plug, dry it thoroughly before inserting it.
- Do not leave the battery in a place exposed to direct sunlight or other hot places. This may result in battery leakage.
- Do not leave the battery near sources of heat such as heaters. Do not heat the battery or throw it into a fire. Doing so may cause bursting or ignition of the battery.
- Do not place the battery into fresh water or sea water, and do not allow the battery terminals to get wet. Doing so may cause overheating, bursting, or ignition of the battery.
- Do not subject the battery to strong shocks or throw it. If this is not observed, overheating, bursting, or fire may occur.
- Use the specified charger and observe the specified charging conditions when charging the specified battery. Not doing so may cause overheating, bursting, or ignition of the battery.
- Don't plug the charger into the battery for a long time when the battery is fully charged or not charged.
- Do not deform, modify, disassemble or apply solder directly to the battery. Doing so may cause leakage, overheating, bursting, or ignition of the battery.
- Do not use the battery if it has any noticeable scratches or other external damage. Doing so may cause bursting, overheating or problems with operation.
- If any liquid leaking from the battery gets into your eyes, immediately wash the affected area thoroughly with clean water such as tap water without rubbing your eyes, and seek medical advice immediately. If this is not done, the battery liquid may damage your eyes.
- If any leaked fluid gets on your skin or clothes, wash it off immediately with clean water. The leaked fluid may damage your skin.
- Use the product according to local laws and regulations.
- Please discard of used batteries according to local regulations.

## **Product Appearance**











Top View



### Bottom View



### Front View



Power and Communication Port

### Left View



## **Standard Operation**

## Power On/Off

When the switch is on, the battery is powered on; when it is off, the battery is powered off.

## Power Display Description

When you turn on the power switch to wake up the system, press the battery display button and the remaining battery will be displayed on the LED indicator. When the battery enters the low voltage protection state or the power switch is turned off, the LED display will not light up.



SOC	LED state
< 20%	All Off
20 – 40 %	One lights ON
40 – 60 %	Two lights ON
60 – 80 %	Three lights ON
> 80%	All lights ON

## Automatic Shutdown

If the output current within 120 minutes is less than 1000mA, the battery will automatically cut off, waking up the battery can be done in the following ways,

1. Power switch to restart 2. Charge the battery.

### **Product Specification**

Model	EA304S26-RB2 EA305S26-RB2
Voltage	48V
Capacity	10.4Ah / 499Wh
Dimension	360 x 157 x 65mm
Weight	3.3 Kg
Charging Time	< 6 hours ( 2A Charger )

### **Charging** (see charger section for complete charging instructions)

- The charging port is on the side of the battery, please open the protective cover and insert the charging plug into the socket for charging.
- Please use a charger designed for lithium-ion batteries to charge the battery.
- When charging is complete and the charging plug is unplugged, please close the protective cover.
- Please refer to the charging indicator to know the charging status.

### Bluetooth

The battery pack supports Bluetooth connection. For details of Bluetooth operation, please refer to the Gomier Bike App Manual in next section.

## <u>CHARGER</u>

### **SPECIFICATIONS**

Brand: SEGL Input Voltage: A/C-100-240V ~ 2A (50/60 Hz) Output Voltage: DC 54.6V / 2A

### **CHARGING MODE**

Red Light: Charging Green Light: Fully Charged Charge Time from Full Discharge: Approximately 6 hours



## **CHARGER**

### **Li-ion Battery Charger Instructions**

#### 1. Features

This is an intelligent charger, which employs power switching technology and is designed specifically for Li-ion batteries.

- (1) Input voltage:100-240Vac. Operating and storage temperature range: 0~30°C. (32~86°F)
- (2) Low noise.
- (3) Reverse polarity protection ensures that the charger is not damaged if the power supply polarity is reversed.

#### 2. Usage

- (1) First connect battery plug (A) into battery then plug (B) directly into wall outlet.
- (2) During the charging cycle, the charge/power indicator light (C) will be red, after fully charged the indicator light will turn green.
- (3) After battery is fully charged (green light is on), unplug wall plug (B) first then unplug battery plug (A).

#### 3. Troubleshooting

- (1) Symptom: Power/Charger light (C) is not illuminated.
  - A. Check to make sure there is power to your AC wall outlet.
  - B. Check to make sure your AC charger plug (D) is fully inserted into the charger.
  - C. Check to make sure your battery plug (A) is fully inserted into the battery.
  - If the above did not resolve problem, ask your dealer for assistance. Do not attempt to repair yourself.
- (2) Symptom: Power/Charger light (C) constantly illuminated red.
  - D. Check battery for signs of damage.

If the above did not resolve problem, ask your dealer for assistance. Do not attempt to repair yourself.

#### 4. Caution

- (1) There is high voltage inside the charger. Do not attempt to open it.
- (2) The charger is designed for indoor use only.
- (3) Do not attempt to recharge any non-rechargeable batteries.
- (4) Contact the manufacturers or retail dealers if there are any problems.
- (5) This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- (6) Children should be supervised to ensure that they do not play with the appliance.
- (7) IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS
- (8) DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. CAREFULLY FOLLOW THESE INSTRUCTIONS
- (9) If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

- 2. Tap the "Gomier Bike" icon.



- 3. After entering the App, turn on the Gomier Bike dashboard, then pair with Bluetooth Bike.
- 4. Confirm that the Bluetooth function is turned on. In the list of Bluetooth devices, select (BHY-BLE). When your phone is connected to the Bluetooth device, the Bluetooth icon will turn green.
- 5. After the successful connection, the current battery information will be displayed.



- 6. Dashboard:
- 6.1. Main Menu:



1	Bluetooth	5	GPS (Map)
2	Speed	6	Battery Information
3	Battery Level	7	Current Trip
4	Settings	8	Screen Lock

6.2. Settings:

Access to settings section:

- User information: Users can fill in their basic information.
- Battery Information: Entering this section there is detailed information for the battery, like current power density, capacity, temperature, etc.
- Software version: Provides current software version information.

< Setting	CUser Infomation Save	Battery Infomation
	User name	CURRENT CELL VOLTAGE OTHER
User		FW verson
	Date of birth	Gomier Bike V1.0.0
Battery		Current(mA) 0 mA
	Height	Temp 1 (°C) 25 °C
App Version	Body weight	Temp 2 (°C) 25 °C
		Remaining Capacity(mAH) 10000 mAH
	Bicycle brand model	Norminal Capacity(mAH) 10400 mAH
		Cells 13
	Wheel diameter	Max Voltage 4034 mV
		Min Voltage 4012 mV
Battery Infomation	Battery Infomation	App Version
CURRENT CELL VOLTAGE OTHER	Battery Infomation  CURRENT CELL VOLTAGE  OTHER	App Version
Battery Infomation           CURRENT         CELL VOLTAGE         OTHER           Pack Time         2020-09-03 15:25:37	Battery Infomation           CURRENT         CELL VOLTAGE         OTHER           Över Voltage         4200 mV	App Version
Battery Infomation       CURRENT     CELL VOLTAGE       Pack Time     2020-09-03 15:25:37       Cell Voltage(mV)	Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Over Voltage     4200 mV	App Version
Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Pack Time     2020-09-03 15:25:37       Cell Voltage(mV)       Pack Voltage     52389 mV	Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Over Voltage     4200 mV	App Version
Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Pack Time     2020-09-03 15:25:37       Cell Voltage (mV)       Pack Voltage     52389 mV       Cell Voltage 01     4028 mV	Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Over Voltage     4200 mV	App Version
CURRENT     CELL VOLTAGE     OTHER       Pack Time     2020-09-03 15:25:37       Cell Voltage(mV)       Pack Voltage     52389 mV       Cell Voltage 01     4028 mV       Cell Voltage 02     4012 mV	Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Over Voltage     4200 mV	C App Version
Battery Infomation         CURRENT       CELL VOLTAGE       OTHER         Pack Time       2020-09-03 15:25:37         Cell Voltage(mV)         Pack Voltage       52389 mV         Cell Voltage 01       4028 mV         Cell Voltage 02       4012 mV         Cell Voltage 03       4031 mV	Battery Infomation       CURRENT     CELL VOLTAGE     OTHER       Over Voltage     4200 mV	C App Version
Battery Infomation         CURRENT       CELL VOLTAGE       OTHER         Pack Time       2020-09-03 15:25:37       Other         Cell Voltage (mV)       Pack Voltage       52389 mV         Cell Voltage 01       4028 mV       Other         Cell Voltage 02       4012 mV       Other         Cell Voltage 03       4031 mV       Other         Cell Voltage 04       4029 mV       Other	CURRENT     CELL VOLTAGE     OTHER       Over Voltage     4200 mV	Comier Bike V1.0.0
Battery Infomation         CURRENT       CELL VOLTAGE       OTHER         Pack Time       2020-09-03 15:25:37       OTHER         Cell Voltage(mV)       Pack Voltage       52389 mV         Cell Voltage 01       4028 mV       Other         Cell Voltage 02       4012 mV       Other         Cell Voltage 03       4031 mV       Other         Cell Voltage 04       4029 mV       Other	CURRENT       CELL VOLTAGE       OTHER         Over Voltage       4200 mV	Comier Bike V1.0.0
Battery Infomation         CURRENT       CELL VOLTAGE       OTHER         Pack Time       2020-09-03 15:25:37       OTHER         Pack Voltage (mV)       Cell Voltage (mV)       Other         Pack Voltage       52389 mV       Other         Cell Voltage 01       4028 mV       Other         Cell Voltage 02       4012 mV       Other         Cell Voltage 03       4031 mV       Other         Cell Voltage 04       4029 mV       Other         Cell Voltage 05       4031 mV       Other	CURRENT CELL VOLTAGE OTHER   Over Voltage 4200 mV   Under Voltage 2800 mV   Short Circuit 0   Charge Cycle 1   Life Cycle 0   ODCP 1 50   ODCP 2 70   Charge Time 3	App Version          Omega         Omega         Gomier Bike V1.0.0

#### 6.3. Navigation:

GPS allows users to record the current riding route. When "Start" is pressed, the route will begin recording. Also, when finish riding, you must press "Finish" to save the current record. This App can automatically record 10 tracks, tap 😒 to check history.



## Notes

Sun Seeker P.O. Box 161859, Miami, FL 33116-1859 info@sunseeker.bike