

# B-COCKPiT



## Operating Manual

### BL18 Model

Version: CH-20200707

**digitech**  
Riding Evolved

## Important Information Regarding Safe Operations:

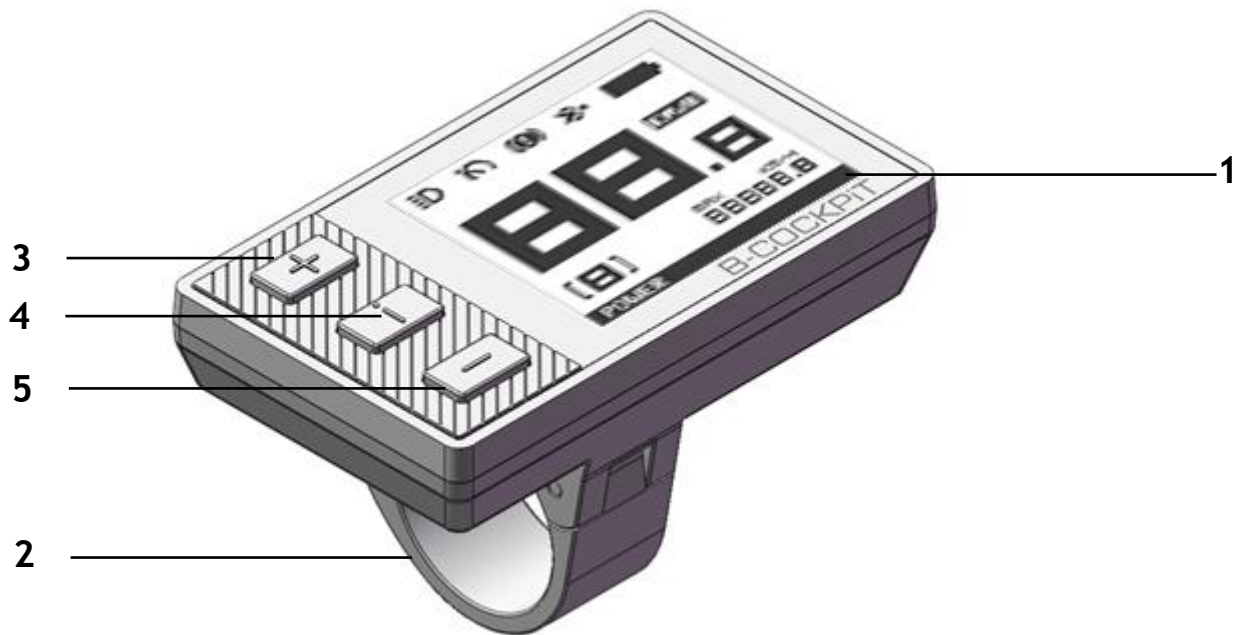
1. Turn OFF the main power of the E-bike before plug / unplug the HMI, or it may lead to permanent electrical damage to the HMI and the E-bike.
2. Do Not overtighten the bolts when installing the HMI to the E-bike, a torque of 0.2N.m is sufficient to secure the HMI to the handlebar, overtightening the bolts may cause damage to the HMI.
3. Do not immerse the unit in water or clean it with pressurized water. Clean the unit using a soft cloth dampened only with water. Do not use any detergents.
4. The USB port, when exposed, does not provide water protection. When riding in the rain, an external device must not be connected and the USB Cap must be completely closed and sealed.
5. Do not dispose HMI or any other e-bike components into house-hold wastes, follow your local regulations and dispose them in an environmental-friendly manner.
6. Damage / malfunction caused by improper installation or usage are not covered by after-sales service.

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## ■ Product Description and Specifications

### ● Parts Description

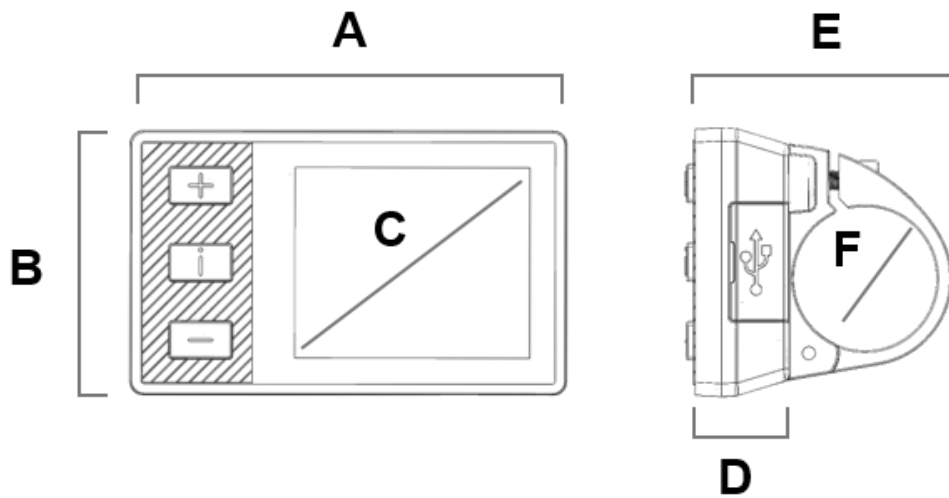


1. 1.77" LCD display
2. Mounting Bracket
3. "+" Button
4. "i" Display function button
5. "-" Button

### ● Technical Data

Rated operating voltage	36V / 48 V DC
Operating temperature	-20 °C ~ +45 °C
Storage temperature	-20 °C ~ +45 °C

## ● Dimensions and Features



### Core Data

Display Type	LCD
Nominal Voltage	36 / 48 VDC
Supported Modes	0 - N with Walk Assist
Bus System	UART
Connectivity	Bluetooth*

### Dimensions

Dimension A	67 mm
Dimension B	40 mm
Dimension C	1.77 inch
Dimension D	14 mm
Dimension E	39 mm
Dimension F	22.2 mm

### Keypad

No. of Buttons	3
Button Functions	+ / - / i

\* Available for BL18XS

### Displayed Information

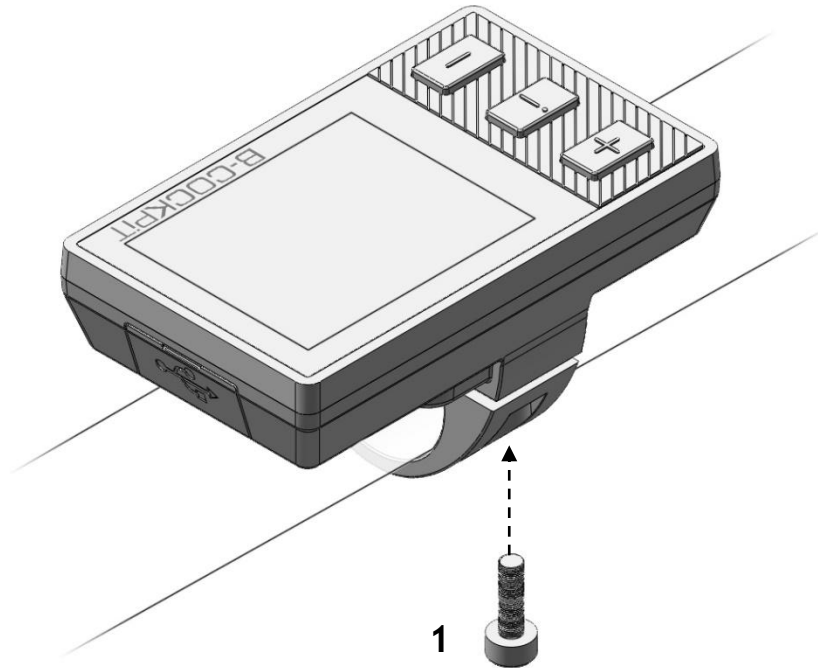
Real Time Speed	Yes
Real Time Motor Power	Digital and Graphical
Battery Level	Graphical
Pedal Assist Level	Yes
Max Speed	Yes(Reset-able)
Average Speed	Yes(Reset-able)
Single Trip Distance	Yes (Reset-able)
Total Distance	Yes
Calories Burnt	Yes
Light Indication	Yes
Error Code	Yes
Setup Menu	Yes

### Conformities

IP-Level	IPX5 (USB Cap Closed)
Certifications	CE / EN15194 / RoHS

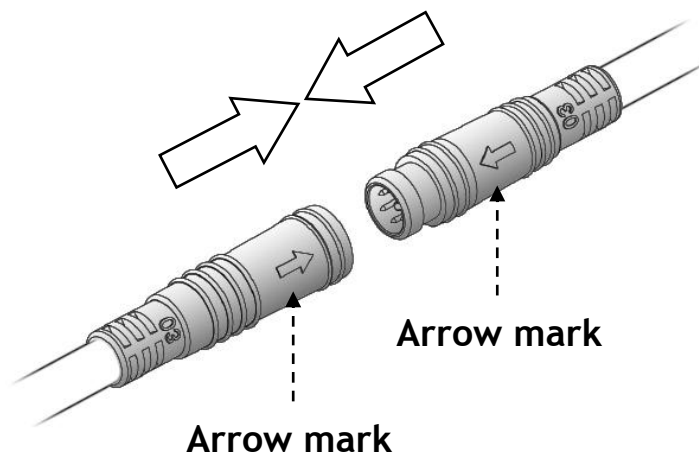
## ■ Installation

### ● Install the BL-18 Unit



1. Use M3 Hex Socket Screw 1 to secure the mounting bracket to the left side of the handle bar. **Tightening torque: 0.2N.m.** Do Not Overtighten or it may cause damage to the HMI

### ● Connect the cables

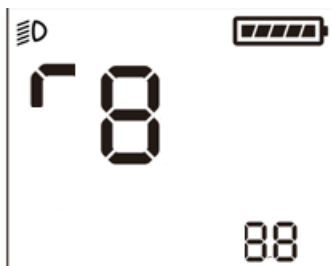


- Securely connect the cables of B-COCKPiT with E-bike controller by aligning the 2 arrow marks.

## ■ System Operations

### ● Initial Operations

1. Press and hold “+” and “-” together for 2 seconds to enter the system menu.
2. Use “+” / “-” to navigate to the “S8” or other options and press “i” to confirm.
3. Use “+” / “-” to adjust parameters.
4. The lower right corner is the parameters to be adjusted
5. After adjusting a set of numbers, press the “i” button to skip to the next set of numbers and repeat the operation until all numbers are set.



Code	Value	Parameters	Unit	精度
S1	Wheel Size	4.0 - 99	Inch	0.5
S2	Perimeter	0-9999 (Calculated by wheel size by default. 3.14*D)	mm	1
S3	Speed Unit	00: Km/h None 00: MPH	-	-
S4	Speed Limit	00 - 99 (0 means no speed limit)	km/h	1
S5	# of Magnetics	1-99	/	1
S6	Backlight	1 - 5	/	1
S7	Auto Power Off	0 - 99 (0 means always on)	min	1
S8	Protocol	00: KM5S; 01: Li 2; 02: Customized	-	-
S9	Voltage	36; 48	V	-
SA	Electricity calculation method	00: The controller reports the voltage, and display calculates 01: Controller reported power; 02: The display detect the voltage and calculates	-	-
Sb	Walk Mode	00: Yes; 01: No	-	-
Sc	Default Assist	0-max	/	1
Sd	Max Assist	1-9	/	1
SE**	Logo	00: Digitech (Default); 01: Neutral welcome screen; 02: Customized Logo	-	-
SF	Reset	00: Yes; 01: No		
SH	Serial communication	00: 3.3V; 01: 5V	-	-

Sh	Current threshold	00-99 (0 means no limit)	A	1
SJ**	Buzzer	00: On; 01: off	-	-
Sn**	Buzzer alert	0-99 (0 means no alert)	Km/h	0.1
SP	Cruise	00: On; 01: off	-	-
Su	Power ON Password	00: On; Default 2020 01: Off;	-	-
SU	Advanced Setting Password	00: On; Default 2020 01: Off;	-	-

\*\* According to the optional function of the display of different configurations, the value of the display without this function is invalid.

## ● Button Functions

### 1. “+” button:

	Short Press	Long Press	Long Press & Hold
Meter Interface	Assist level Up	E-bike Lights On/Off	----
Menu Interface	Cursor Up / Increase	----	----

### 2. “-” button:

	Short Press	Long Press	Long Press & Hold
Meter Interface	Assist level Down	----	6km/h Start-up Mode
Menu Interface	Cursor Down / Decrease	Cancel and Go Back	----

### 3. “i” button:

	Short Press	Long Press	Long Press & Hold
Meter Interface	Change Info Display	System On/Off	----
Menu Interface	Ok / Confirm	----	----

### 4. & Press “+” and “-” buttons together:

	Short Press	Long Press	Long Press & Hold
Meter Interface	----	Enter Menu Interface	----
Menu Interface	----	Save Changes and Exit	----

## ● Meter Interface





仪表界面

\* The riding information display area can display a variety of riding data, press the "i" key to switch

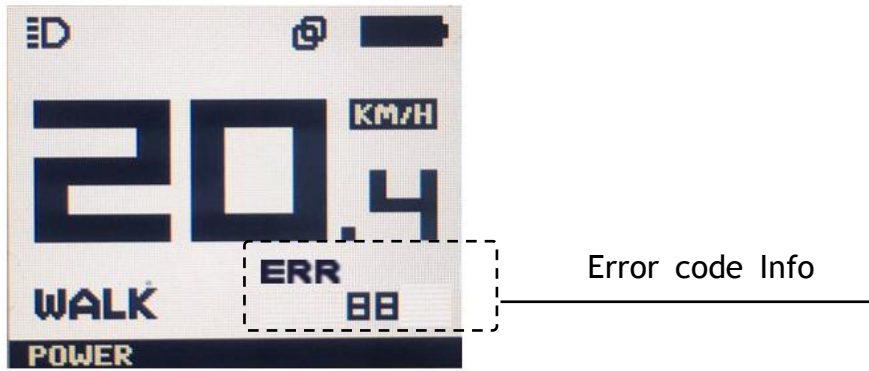


### CAUTIONS REGARDING SYSTEM CONFIG

Changing the parameters in "System Config" without proper knowledge may cause abnormal behaviors of the E-bike.  
And may even lead to unsafe situations.  
Consult with the manufacturer first before making any changes on your own.

## ■ Miscellaneous Interfaces

### ● Error-Code Notification

**Error-Code Table (example only, customer dependent)**

Error-Code	Description	Corrective Measure
21	Controller Protection	Check if 3-phase power lines are properly connected
22	Throttle Error	Check throttle connection, replace motor if necessary
23	Motor Phase Error	Check motor connection, replace motor if necessary
24	Speed Sensor Error	Check sensor connection, replace sensor if necessary
25	Brake Error	Check Brake connection, replace brakes if necessary
30	Communication Error	Check connectors and contacts between each components

## ■ Maintenance and Service

### ● Maintenance and Cleaning

Do not immerse the unit in water or clean it with pressurized water.

Clean the unit using a soft cloth dampened only with water. Do not use any detergents.

! The USB port, when exposed, does not provide waterproof protection. When riding in the rain, an external device must not be connected and the USB Cap must be completely closed and sealed.

### ● After-sales Service

Please contact [support@riding-evolved.com](mailto:support@riding-evolved.com) for inquiries and after-sales services.

### ● Disposal



Follow your local regulations and dispose the B-COCKPiT unit in an environmental-friendly manner.

Do not dispose B-COCKPiT or any other e-bike components into house-hold wastes!