#### Speed The



\$ 1/2

18

Light on

 $\bigcirc$ 

Hold the

Button

<u>\_\_\_\_\_</u>

Flash

3

Hold the

Button

1 second

Thank you for purchasing our product. Before installing/operating the product, read the instructions carefully and retain them for future reference.

#### ▲ Attention!

- For installation, follow the steps described. Any damage caused by wrong installation shall be imputed to the users.
- To avoid a short circuit from occurring do not pull or modify the wires during installation.
- Do not disassemble or change any parts. Opening and dissassembling this unit will void any warranty.
- Maintenance and repairs should be executed by our professionals only.

#### Symbol description:

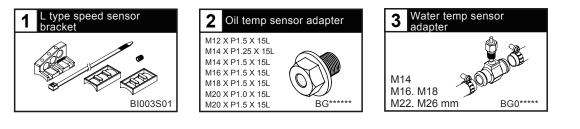
#### NOTE

Some procedures must be followed to avoid damages to the product.

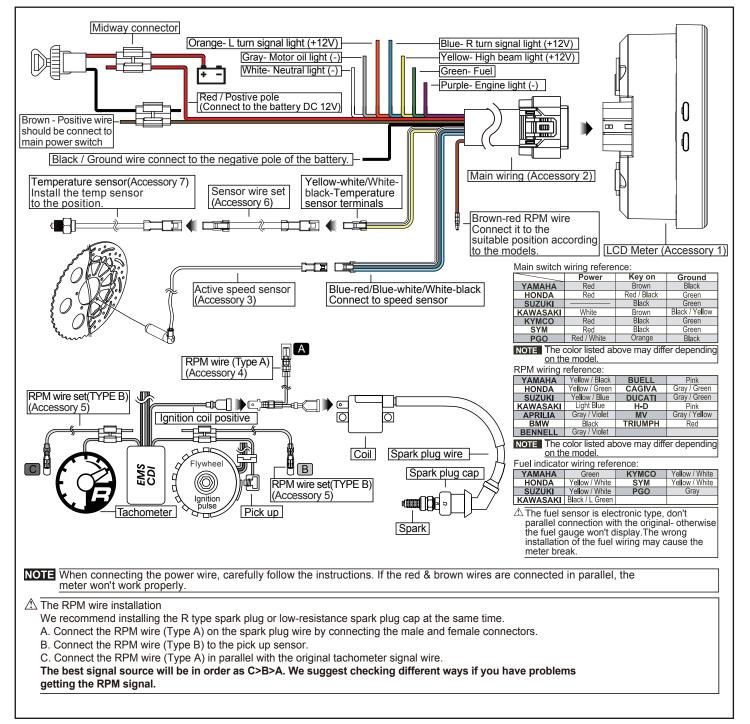
WARNING! Certain procedure must be followed to avoid damages to yourself, to the vehicle or to others.

#### 3 seconds 1-1 Accessories 1 LCD Meter X1 2 Main wiring harness X 1 3 Active speed sensor X1 4 RPM wire (Type A) X1 5 6 Sensor wire set X1 8 RPM wire set(TYPE B) X1 7 Temperature sensor X1 10 M5x5xP0.8 Hexagon screw X 2 12 Meter bracket X1 9 11 2.5 mm Allen key X 1 (0 $(\mathbf{O})$ Ο 14 M5x16L Allen screw X2 13 M5 washer X2 15 Rubber strip X1 16 Handlebar clamp X1 18 M8 washer X1 19 M8xP1.25 nut X1 20 Rubber cover X2 17 M8x20L Allen screw X1

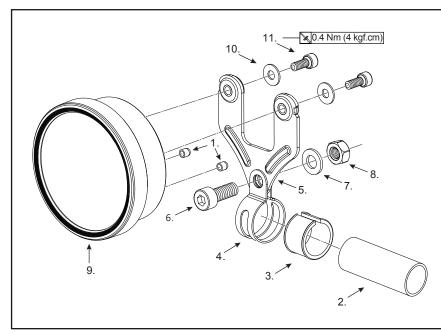
## **1-2** Optional accessories



# 2 Wiring Installation Instructions



# **3** Installation Instructions



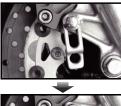
#### Follow the steps below during installation.

- 1. Rubber coverx2 (Accessory 20)
- 2. Handlebar
- 3. Rubber strip (Accessory 15)

4	CAUTION! Refer to the to use rubb diameter.	list below and decide whether er strip according to the grip	
	Handle bar SIZE	Use Rubber strip	
	7/8"(22.2 mm)	NO	
	1"(25.4 mm)	YES	

- 4. Handlebar clamp (Accessory 16)
- 5. Meter bracket (Accessory 12)
- 6. M8x20LxP1.25 Allen screw (Accessory 17)
- 7. M8 washer (Accessory 18)
- 8. M8xP1.25 nut (Accessory 19)
- 9. LCD Meter (Accessory 1)
- 10. M5 washerX2 (Accessory 13)
- 11. M5x16LxP0.8 Allen screwX2 (Accessory 14)

### MOTO / SCOOTER S-type speed sensor bracket instruction



Install the s-type sensor bracket.



Install the speed sensor on the bracket.



Adjust the sensor bracket position to make sure that the sensor faces the magnet to prevent bad speed signal or no signal!



Adjust the distance between sensor and magnet. We suggest you make sure the distance is under **1 mm** for an optimal speed signal.

## MOTO / SCOOTER L-type speed sensor bracket instruction



Install the L-bracket and the anti-slip rubber on the front fork and adjust it to the proper height and angle.



Install the speed sensor into the proper hole on the bracket.

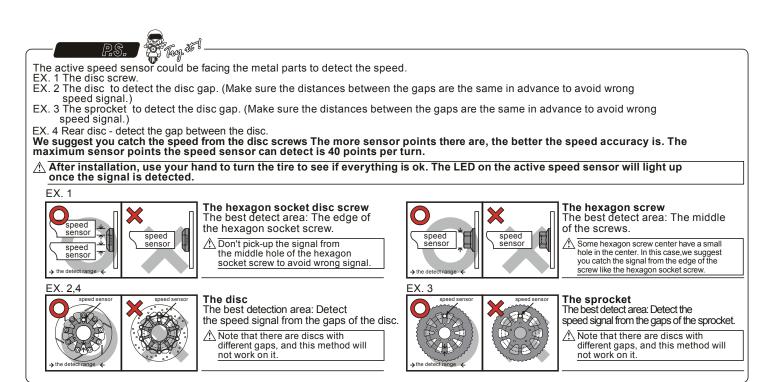


proper height and angle.

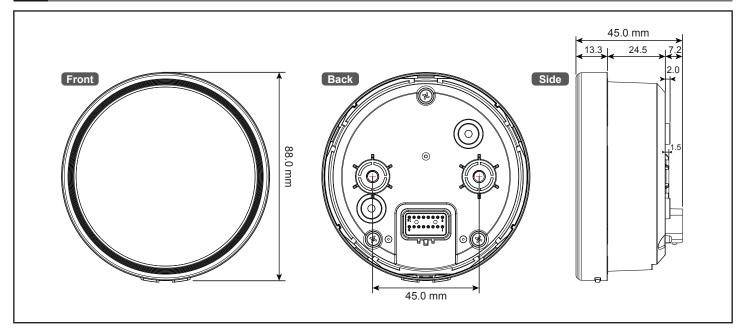




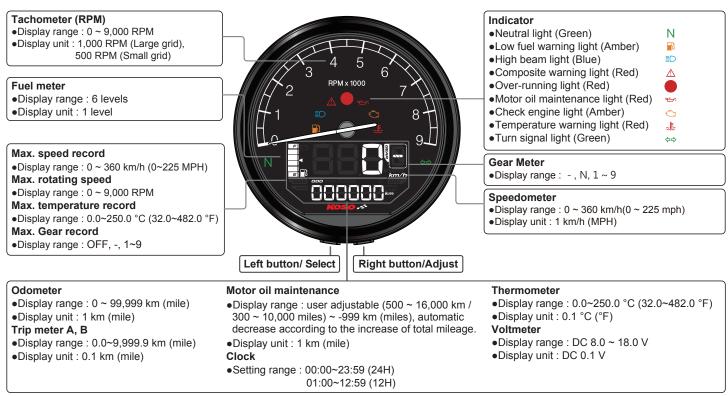
Adjusting the distance between the sensor and screw to get the best speed signal. Make sure the distance is under 2mm to get the best signal.



## 3-1 Meter Size



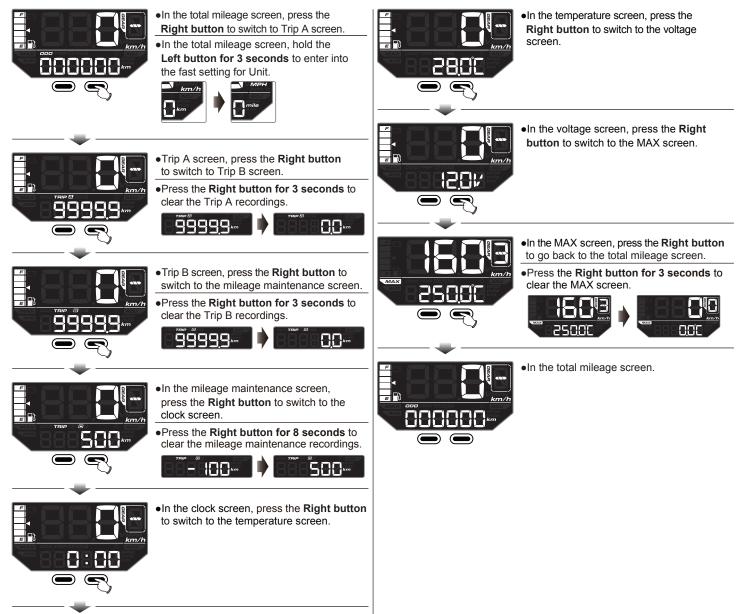
## **3-2** Basic Function Instructions



## **3-3** Specifications

Speedometer	Display range : 0 ~ 360 km/h(0 ~ 225 mph) Display unit : 1 km/h (MPH)	<ul> <li>Max. temperature record</li> </ul>	Display range : 0.0~250.0 °C (32.0~482.0 °F) Display unit : 0.1 °C (°F)
Speeding warning	Setting range : 30 ~ 360 km/h (19~225 MPH),	•Fuel meter	Display range : 6 levels
	when setting value is reached or above, warning		Display unit : 1 level
	light will illuminate.		Setting range : 100 Ω, 250 Ω, 270 Ω, 390 Ω,
	Setting unit : 1 km/h (MPH)		510 Ω, 1200 Ω, SW, Custom (learning mode),
Max. speed record	Display range : 0 ~ 360 km/h (0~225 MPH)		OFF
<u></u>	Display unit : 1 km/h (MPH)	oLow Fuel warning	Setting range : 0~3 grid, when setting value is
Odometer	Setting range : 0 ~ 99,999 km (mile) Setting unit : 1 km (mile)		reached or below, warning light will illuminate. Setting unit : 1 grid
Trip meter A, B	Display range : 0.0~9,999.9 km (mile), may return to zero manually. Display unit : 0.1 km (mile)	Clock	Setting range : 00:00~23:59 (24H)
		CIUCK	01:00~12:59 (12H)
		<ul> <li>Voltmeter</li> </ul>	Display range : DC 8.0 ~ 18.0 V
Motor oil maintenance	Display range : user adjustable (500 ~ 16,000 km /		Display unit : DC 0.1 V
	300 ~ 10,000 miles) ~ -999 km (miles), automatic	○Low voltage warning	Setting range : DC 8.0~13.0 V, when setting value
	decrease according to the increase of total mileage.		is reached or below, warning light will illuminate.
	Display unit : 1 km (mile)		Setting unit : 0.1 V
Circumference	Setting range : 300~2,500 mm	<ul> <li>Composite warning</li> </ul>	Setting range : Overspeed, Low voltage, Max. Gear
	Setting unit : 1 mm	light	Setting range : Lit(L), Slow Flash(S), Fast Flash(F), OF
Sensitive point	Setting range : 1~20 P	<ul> <li>Backlight brightness</li> </ul>	Setting range : 1/3(Darkest)~ 3/3(Brightest)
0 11 1	Setting unit : 1 P		Setting unit : 1/3
Gear Meter	Display range : -, N, 1~9 Setting range : OFF, Learning	<ul> <li>Backlight color</li> </ul>	Setting range : white, red, orange, yellow, green, blue, light blue, purple Loop switch
Max. Gear record	Display range : OFF, -, 1~9	●Unit	Speed unit : km/h , MPH
Tachometer (RPM)	Display range : 0 ~ 9,000 RPM Display unit : 1,000 RPM (Large grid), 500 RPM(Small grid)		Temperature unit : °C (Celsius) and °F (Fahrenheit)
		<ul> <li>Voltage</li> </ul>	DC 12V
		•Operating temperature	-10∼ +60 °C
Pre-shift light warning	value is reached or above, warning light will illuminate.	<ul> <li>Storage temperature</li> </ul>	-20~ +80 °C
		<ul> <li>Specification</li> </ul>	JIS D 0203(S2)
	Setting unit : 100 RPM	<ul> <li>Meter Size</li> </ul>	D 88 mm
Shift light warning	Setting range : Pre-shift light warning value +100	<ul> <li>Meter Weight</li> </ul>	± 140g
	~ 9,000 RPM, when setting value is reached or	<ul> <li>Indicator</li> </ul>	Neutral light (Green) N
	above, warning light will illuminate.		Low fuel warning light (Amber)
	Setting unit : 100 RPM		High beam light (Blue) ■D
Max. rotating speed	Display range : 0 ~ 9,000 RPM		Composite warning light (Red) 🛛 🛆
RPM Input Pulse	Setting range : P-0.5, 1 ~ 6		Over-running light (Red)
			Motor oil maintenance light (Red) 🛩
Signal Impulse	Setting range : LO-ACT, HI-ACT		Check engine light (Amber)
Thermometer	Display range : 0.0~250.0 °C (32.0~482.0 °F)		Temperature warning light (Red)
	Display unit : 0.1 °C (°F)		Turn signal light (Green) ↔
Overheat warning	inter county failed to reaction of aborto, fraining	NOTE Design and spor	cifications are subject to change without notice.
setting		Design and spec	
	light will illuminate. Setting unit : 1 °C (°F)		

## 4 Main menu switching description

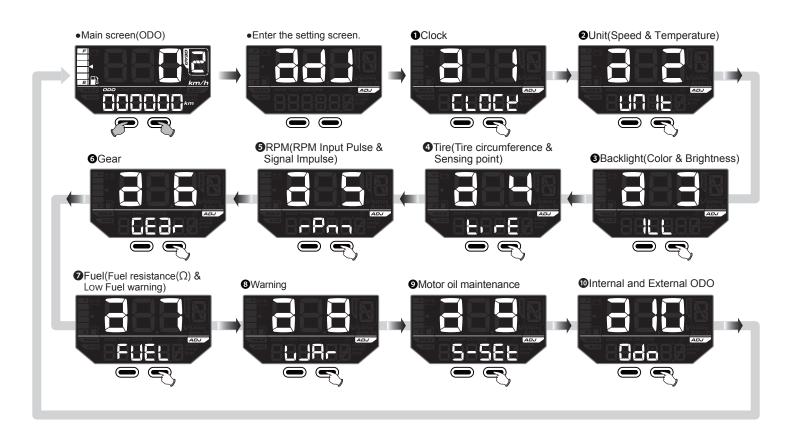


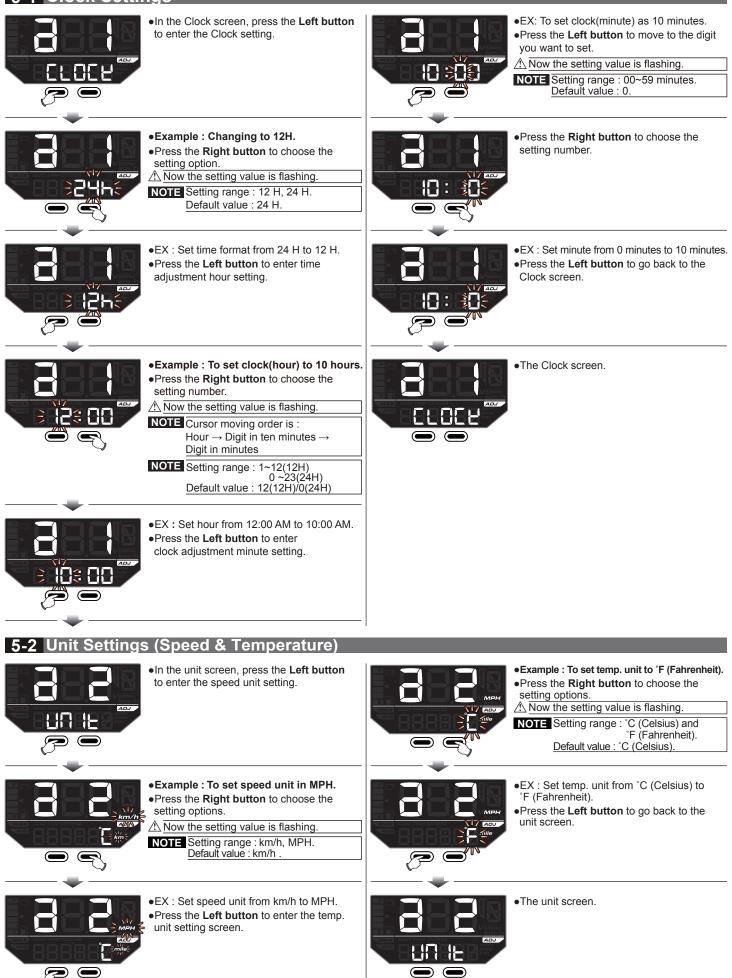
•Press the Left button+Right button for 3 seconds in the main screen(ODO) to switch to the setting screen.

•Press the Right button to select

OClock @Unit(Speed & Temperature) Backlight(Color & Brightness) Tire(Tire circumference & Sensing point) RPM(RPM Input Pulse & Signal Impulse)
 Gear Pruel(Fuel resistance(Ω) & Low Fuel warning) Warning Motor oil maintenance Internal and External ODO

**NOTE** During setting, if no button is pressed for 30 seconds, it will automatically return to the startup screen.





#### In the backlight(Color/Brightness) screen, •Example : To set the backlight brightness press the Left button to enter the at 2/3. •Press the Right button to choose the backlight color setting. setting number. Now the setting value is flashing. NOTE Setting range 5 1/3(Darkest)~ 3/3(Brightest). Default value : 1/3. NOTE The backlight brightness will Example : To set backlight color to yellow. change immediately after Press the Right button to choose the color. you set the value. 🗥 Now the setting value is flashing NOTE Setting range : white, red, orange, •EX : The backlight brightness setting is yellow, green, blue, light blue, purple changed from 1/3 to 2/3. Default value : White •Press the Left button to go back to the NOTE The backlight color will change backlight(Color/Brightness) screen. immediately after you set the value. •EX : Set backlight color from white to yellow. • Press the Left button to enter the backlight brightness setting. •The backlight(Color/Brightness) screen. 5-4 Tire settings (Tire Circumference & sensing point In the tire screen, press the Left button to •EX : Set the tire circumference value enter the tire circumference setting. from 1,000 mm to 1,300 mm. Press the Left button to enter the sensor point setting. •Measure the tire circumference (The tire you will install the sensor on) to confirm the sensor point value. •The speed displayed on the meter will be affected by the setting, make sure the setting number is correct before •Example : To set the sensor point you enter the setting. value to 06 P. A Reset this setting value if you Press the Left button to move to the digit you change to a different tire size. want to set. A Now the setting value is flashing. NOTE Setting range : 01 P~20 P. •Example : If the tire circumference is Ð Default value : 01 P. 1,300 mm. Press the Left button to move to the digit you want to set. Press the Right button to choose the A Now the setting value is flashing. setting number. NOTE Setting range : 300~2,500 mm. Default value : 1,000 mm. 12 hog at PS You can use the tire valve as the starting point and the terminal •EX : Set the sensor point value from 01 P point to measure the to 06 P. wheel circumference • Press the Left button to go back to the with a measuring tape. tire screen. 50 • Press the Right button to choose the setting number. The tire screen.

5-3 Backlight Settings (Color & Brightness

## 5-5 RPM Settings (RPM Input Pulse & Signal Impulse)



•In the RPM screen, press the Left button to enter the RPM input pulse setting.



Example : You want to set the RPM input pulse to 2 (4 Stroke, 4 piston).
Press the Right button to choose the setting number.

 ▲ Now the setting value is flashing!

 NOTE
 Setting range : P-0.5, P-1 ~ P-6.

 Default value : P-1.

The setting value	ting ing stroke and lue pistons number.		The corresponding RPM signal number per ignition.
0.5		4C-1P	2 RPM signals per 1 ignition.
1.0	2C-1P	4C-2P	1 RPM signal per 1 ignition.
2.0	2C-2P	4C-4P	1 RPM signal per 2 ignition.
3.0	2C-3P	4C-6P	1 RPM signal per 3 ignition.
4.0	2C-4P	4C-8P	1 RPM signal per 4 ignition.
5.0		4C-10P	1 RPM signal per 5 ignition.
6.0	2C-6P	4C-12P	1 RPM signal per 6 ignition.

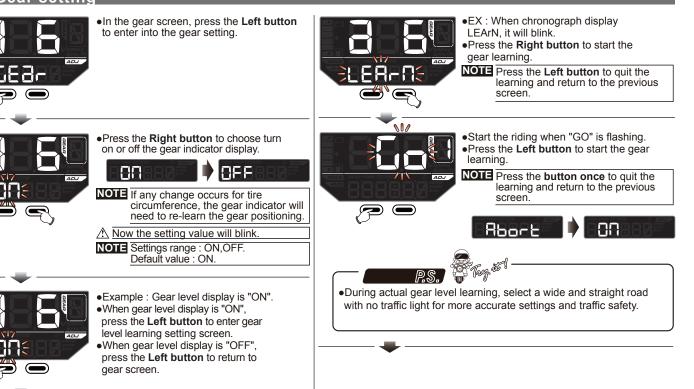
#### 

Most of the 4-cycle bikes with one single piston are igniting once every360 degree, so the setting should be the same as the bike with 2-cycle and one piston engine.



•EX : The RPM input pulse setting is changed from P-1 to P-2.
•Press the Left button to enter the signal impulse setting.







# •Example : Set the signal impulse to Lo-Act.

•Press the **Right button** to choose the setting options.

Note Setting range: Hi-Act, Lo-Act.

Default value: Hi-Act.

•EX : Set the signal impulse from

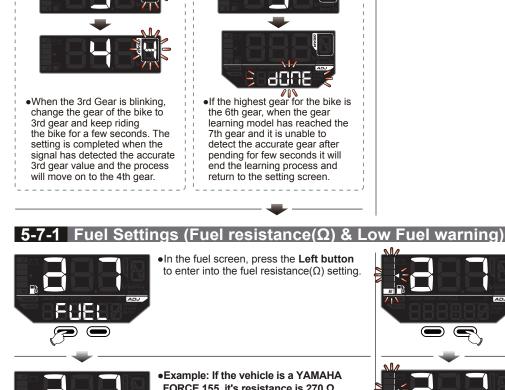
Hi-Act to Lo-Act.

•Press the Left button to go back to the RPM screen.



•The RPM screen.





• Press the Left button to enter the low fuel warning setting.

operation setting.

**NOTE** If the setting is CUSt, it will enter the 5-7-2(Auto) and 5-7-3 (Manual)

•When the 2nd Gear is blinking,

change the gear of the bike to 2nd gear and keep riding

the bike for a few seconds. The

signal has detected the accurate

2nd gear value and the process will move on to the 3rd gear.

setting is completed when the

•When the 1st Gear is blinking,

change the gear of the bike to 1st gear and keep riding

the bike for a few seconds. The

signal has detected the accurate

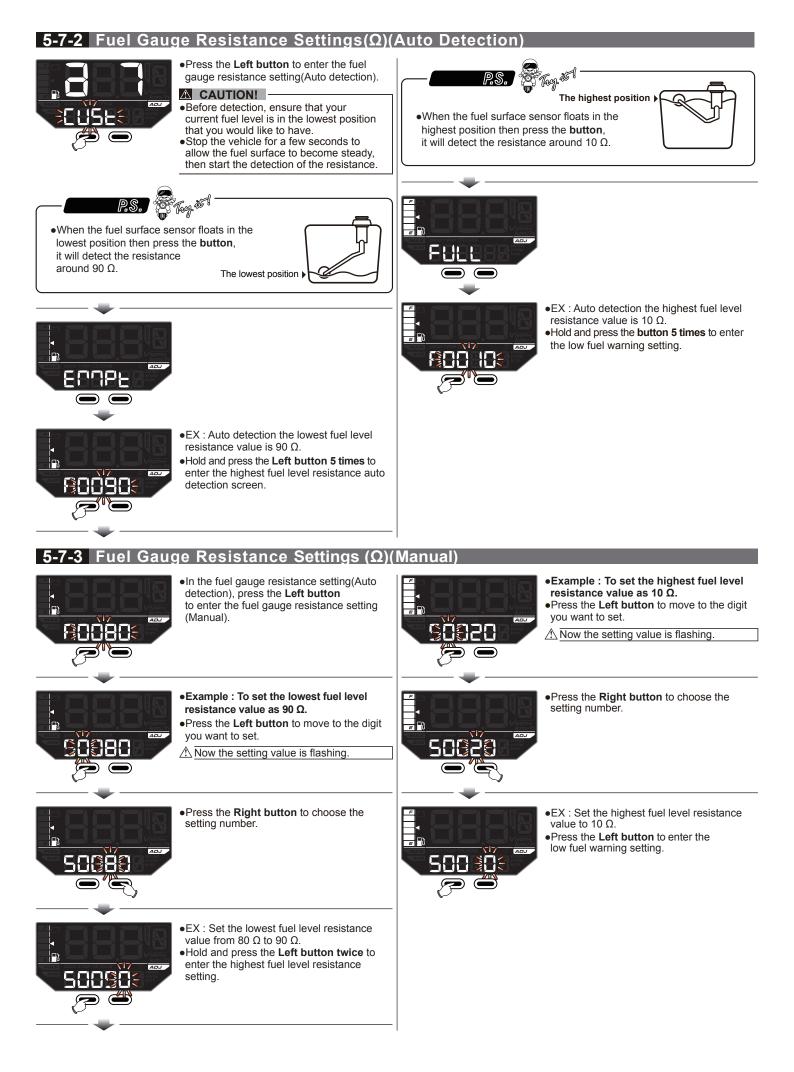
setting is completed when the

1st gear value and the process will move on to the 2nd gear.

•Press the **Right button** to choose the setting number. A Now the setting value is flashing. NOTE Setting range : 0~3 grid. Default value : 1 grid. •EX : Set low fuel warning value from FORCE 155, it's resistance is 270  $\Omega$ 1 grid to 3 grids. • Press the Left button to go back to according to the service manual. •Press the Right button to choose the the fuel screen. setting number. A Now the setting value will blink. P **NOTE** Settings range : 100 Ω, 250 Ω, 270 Ω, 390 Ω, 510 Ω,1200 Ω, SW, CUSt, OFF. Default value : 100 Ω. •The fuel screen. EX : Set fuel meter's resistance value from 100  $\Omega$  to 270  $\Omega$ .

•Example : To set low fuel warning value

to 3 grids



#### 5-8 Warning settings (Overspeed & Over RPM & Overheat & Low voltage)



In the warning screen, press the Left button to enter the warning setting.



ĞН

#### Press the Right button to choose the setting options.

NOTE •Warning indicator operation setting overspeed, refer to 5-8-1. •Warning indicator operation setting -over RPM, refer to 5-8-2. •Warning indicator operation setting -overheat, refer to 5-8-3. •Warning value operation setting -low voltage, refer to 5-8-4.

•EX : Set the overspeed warning value

•Press the Left button to return to the

• Press the Right button to enter next

from 60 km/h to 90 km/h.

In the warning screen.

settina.

warning screen.

5-8-1 Warning settings-Overspeed • Press the Left button to enter the overspeed warning setting. •Example : To set overspeed warning value to 90 km/h. Press the Left button to move to the digit you want to set. ▲ Now the setting value will blink. NOTE Settings range : 30 ~ 360 km/h (19 ~ 225 MPH). Default value : 60 km/h (38 MPH) • Press the Right button to choose the setting number. 





 Press the Left button to enter the pre-shift light warning setting.

•Example : To set pre-shift light

▲ Now the setting value will blink

Press the Left button to move to the

warning value to 5,800 RPM.

digit you want to set.



#### •Example : To set shift light warning value to 6,800 RPM. Press the Left button to move to the

digit you want to set.

NOTE Settings range : Pre-shift light warning

• Press the Right button to choose the setting number.



NOTE Settings range : 1,000 ~ 8,000 RPM. Default value : 5,000 RPM. • Press the Right button to choose the setting number.



•EX : Set the shift light warning value from 6,000 RPM to 6,800 RPM. •Press the Left button to return to the warning screen.



•EX : Set the pre-shift light warning value from 5,000 RPM to 5,800 RPM. •Press the Left button to enter the shift light warning setting.



•In the warning screen. • Press the Right button to enter next setting.

A Now the setting value will blink.

value +100 ~ 9,000 RPM. Default value : 6,000 RPM.

### **5-8-3** Warning settings-Overheat

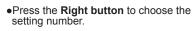


•Press the Left button to enter the overheat warning setting.



EX : Set the overheat warning value from 90 °C to 95 °C.
Press the Left button to return to the warning screen.





Default value : 90 °C (194 °F).

(140 ~ 482 °F).

•Example : To set overheat warning

•Press the Left button to move to the

▲ Now the setting value will blink.
NOTE Settings range : 60 °C ~ 250 °C

value to 95 °C.

digit you want to set.



•In the warning screen.

• Press the **Right button** to enter next setting.

# 5-8-4 Warning settings-Low voltage



•Press the Left button to enter the low voltage warning setting.



•EX : Set the low voltage warning value from 11.5 V to 10.0 V. •Press the **Left button** to return to the warning screen.



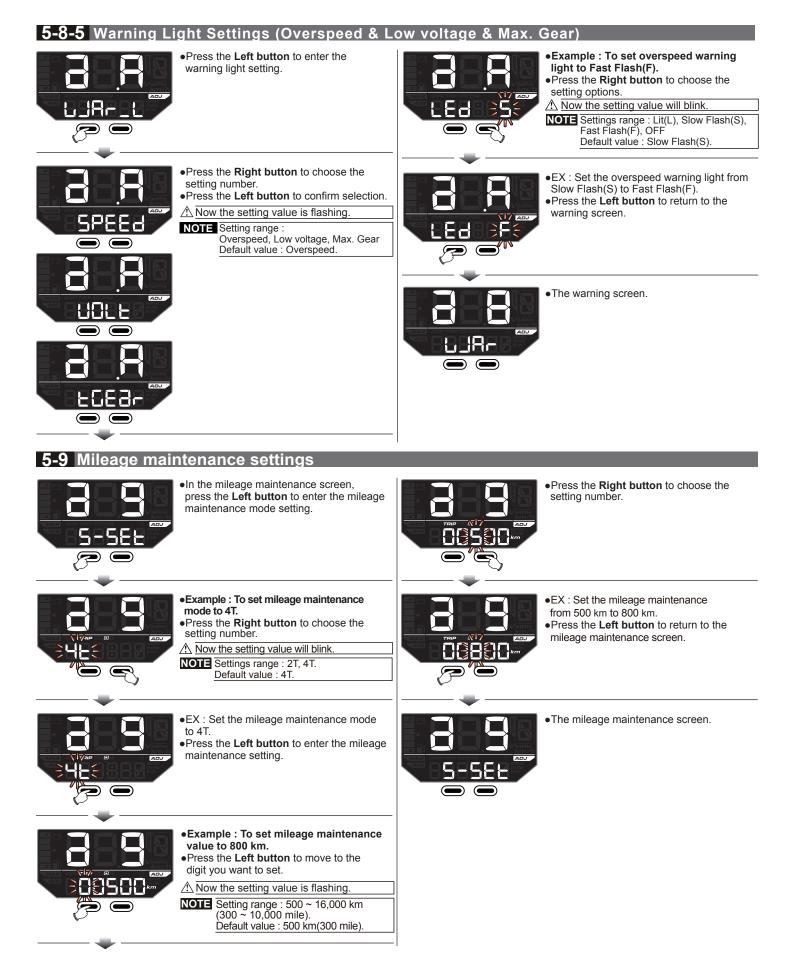


In the warning screen.

Press the Right button to enter next setting.



•Press the **Right button** to choose the setting number.



## 5-10 Internal and External ODO Settings

#### Internal ODO • Press the **Right button** to choose the setting number. •In the internal and external ODO screen, press the Left button to enter the internal and external ODO setting. •The internal ODO screen. •EX : Set external ODO value from 00,000 km to 12,500 km. • Press the Right button to enter the external ODO screen. • Press the Left button to go back to the external ODO screen. Forg ! ▲ User unable to adjust or clear internal ODO. NOTE Display range: 0 ~ 99,999 km (mile). •The external ODO screen. External ODO • Press the Right button to go back to the external ODO screen. • Press the Left button to enter the external ODO setting. SEE SEE 888888 •The internal and external ODO screen. •Example : To set external total distance value to 12,500 km. •Press the Left button to move to the digit you want to set. A Now the setting value is flashing. NOTE Cursor's order : one hundred thousand $\rightarrow$ ten thousands $\rightarrow$ thousand →hundred→ten→digit. NOTE Setting range 0~99,999 km (mile)

#### 6 Troubleshooting

Trouble	Check item	Trouble	Check item
The meter doesn't work	<ul> <li>The power isn't supplied to the meter.</li> </ul>	Fuel meter does not	<ul> <li>Check your fuel tank.</li> </ul>
when the power is on.	$\rightarrow$ Make sure the wiring is connected.	display or display	•May be poor connection of the harness.
	The wiring and fuse are not broken. →The battery is too old to supply needed	error.	→Make sure the wires are connected correctly.
	power (DC 12 V).		•Check the setting.
	P = (= = ).		$\rightarrow$ Check the settings menu if the
The meter shows	<ul> <li>Check the voltage of your battery and</li> </ul>		fuel settings are correct.
incorrect information or	make sure the voltage is over DC 12 V.		
keeps performing		Thermometer does not	Make sure the temperature wire is
system reboot.		display or display error.	connected properly. →check if the temperature wire is connected
Speedometer does not	•Make sure the speed sensor is connected		correctly.
display or display error.	properly.		
	→check the speed sensor wire is connected	The clock is incorrect.	•Check the setting.
	correctly.		$\rightarrow$ Check the settings menu, the clock settings
	•Check the setting.		are correct.
	$\rightarrow$ Check the settings menu if the	The meter indicator	•May be poor connection of the harness.
	speed of the settings are correct.	doesn't display.	$\rightarrow$ Make sure the wires are
RPM meter does not	<ul> <li>Make sure the RPM wire is connected</li> </ul>	aboont alophayi	connected correctly.
display or display error.	properly.		
	$\rightarrow$ check if the RPM wire is connected		
	correctly.		
	•Check the setting.		
	→Check the settings menu if the RPM of the settings is correct.		

X If the problems still cannot be solved, contact our technical department for assistance.

