





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.









Hold the Button

Hold the Button 3 seconds

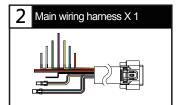
Symbol description:

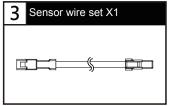
NOTE

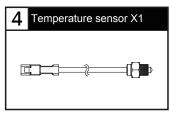
WARNING! Certain procedure must be followed to avoid damages to yourself, to the vehicle or to others.

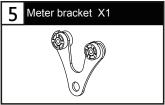
1-1 Accessories

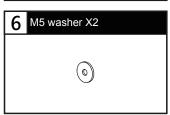




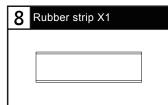






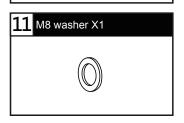


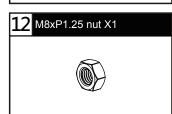




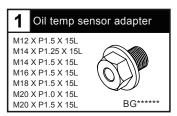


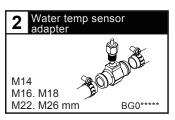






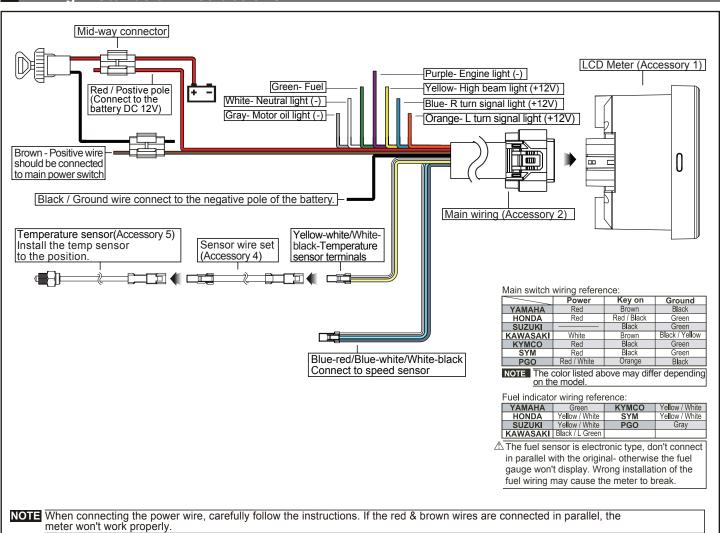
1-2 Optional accessories



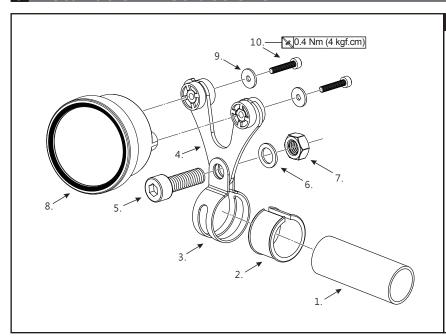


NOTE Some of the option accessories may be purchased separately. For more details, contact your local distributor.

2 Wiring Installation Instructions



3 Installation instructions



Follow the steps below during installation.

- 1. Handlebar
- 2. Rubber strip (Accessory 8)

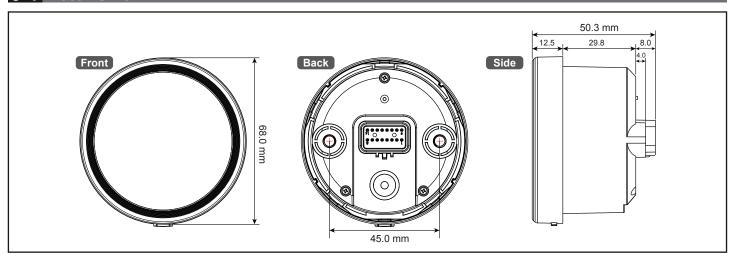
A CAUTION! Refer to the list below and decide whether

Refer to the list below and decide whether to use rubber strip according to the grip diameter.

Handle bar SIZE	Use Rubber strip	
7/8"(22.2 mm)	NO	
1"(25.4 mm)	YES	

- 3. Handlebar clamp (Accessory 9)
- 4. Meter bracket (Accessory 5)
- 5. M8x20LxP1.25 Allen screw (Accessory 10)
- 6. M8 washer (Accessory 11)
- 7. M8xP1.25 nut (Accessory 12)
- 8. LCD Meter (Accessory 1)
- 9. M5 washer X2 (Accessory 6)
- 10. M5x16LxP0.8 Allen screw X2 (Accessory 7)

3-1 Meter Size



3-2 Basic Function Instructions

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Speedometer

•Display range : 0 ~ 160 km/h (MPH)

Display unit : 20 km/h (MPH) (Large grid),
 10km/h (MPH) (Small grid)

Indicator

•High beam light (Blue)

Turn signal light (Green)

•Composite warning light (Red)

•Speeding warning (Red)

•Motor oil maintenance light (Red)

Neutral light (Green)

•Check engine light (Amber)

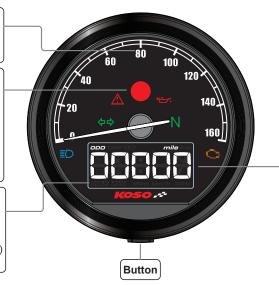
Max. speed record

Display range: 0~160 km/h (MPH)Display unit: 1 km/h (MPH)

Max. temperature record

•Display range : 0.0~250.0 °C (32.0~482.0 °F)

•Display unit : 0.1 °C (°F)



Odometer

●Display range: 0 ~ 99,999 km (mile)

•Display unit : 1 km (mile)

Trip meter A, B

•Display range : 0.0~9,999.9 km (mile)

Display unit: 0.1 km (mile)

Fuel meter

Display range: 10 levels (100%)Display unit: 1 level (10 %)

Clock

•Setting range : 00:00~23:59 (24H)

01:00~12:59 (12H)

Thermometer

•Display range: 0.0~250.0 °C (32.0~482.0 °F)

•Display unit : 0.1 °C (°F)

Voltmeter

●Display range: DC 8.0 ~ 18.0 V

•Display unit : DC 0.1 V

3-3 Specifications

•Speedometer	Display range : 0 ~ 160 km/h (MPH) Display unit : 20 km/h (MPH) (Large grid), 10km/h (MPH) (Small grid)
∘Speeding warning setting	Display range: 30~160 km/h (19~100 MPH), when setting value is reached or above, warning light will iluminate. Display unit: 1 km/h (MPH)
oMax. speed record	Display range : 0~160 km/h (MPH), can return to zero manually Display unit : 1 km/h (MPH)
○Odometer	Setting range : 0 ~ 99,999 km (mile) Setting unit : 1 km (mile)
∘Trip meter A, B	Display range: 0.0~9,999.9 km (mile), can return to zero manually Display unit: 0.1 km (mile)
∘ Circumference	Setting range : 300~2,500 mm Setting unit : 1 mm
○Sensitive point	Setting range : 1~20 P Setting unit : 1 P
Temperature	Display range : 0.0~250.0 °C (32.0~482.0 °F) Display unit : 0.1 °C (°F)
○Overheat warning	Setting range: 60~250 °C(140~482 °F); when setting value is reached or above, warning light will iluminate. Setting unit: 1 °C (°F)
Max. temperature record	Display range: 0.0~250.0 °C (32.0~482.0 °F), can return to zero manually Display unit: 0.1 °C (°F)
●Fuel meter	Display range : 10 levels (100%) Display unit : 1 levels (10%)
Fuel Gauge Resistance(Ω)	Setting range : 100 Ω , 250 Ω , 270 Ω , 390 Ω , 510 Ω ,1200 Ω , Sw, Custom(learning mode), OFF
○Low Fuel warning	Setting range: 0~30%, when setting value is reached or below, warning light will illuminate. Setting unit: 10%

Clock	Setting range : 00:00~23:59 (24H)		
	01:00~12:59 (12H)		
Voltmeter	Display range : DC 8.0 ~ 18.0 V		
	Display unit : DC 0.1 V		
○Low voltage warning	Setting range : DC 8.0~13.0 V, v	•	
	is reached or below, warning ligh	nt will illuminate.	
	Setting unit: 0.1 V		
 Composite warning light 	, ,		
	Overheat(TEMP).		
	Setting range : Lit.(L), Slow Flas	sh(S), Fast Flash(F),	
 Backlight brightness 	Setting range: 1/3(Darkest)~ 3/3(Brightest) Setting unit: 1/3		
oBacklight color		ae vellow areen	
Obacklight color	Backlight color Setting range : white, red, orange, yellow, gre blue, light blue, purple Loop switch		
●Unit	Speed unit: km/h, MPH	nton	
- OTTIC	Temperature unit : °C (Celsius) and	l °F (Fahrenheit)	
 Operating voltage 	DC 12V		
 Operating temperature 	-10~ +60 °C		
Storage temperature	-20~ +80 °C		
 Specification 	JIS D 0203(S2)		
Meter Size	D 60 mm		
Meter Weight	± 100 g		
Indicator	High beam light (Blue)	≣ D	
	Turn signal light (Green)	今今	
	Composite warning light (Red)	\triangle	
	Speeding warning (Red)		
	Motor oil light (Red)	* **	
	Neutral light (Green)	N	
	Check engine light (Amber)		

NOTE Design and specifications are subject to change without notice.

4 Main Menu Switching Description



- •In the total mileage screen, press the **button** to enter the TRIP A screen.
- In the total mileage screen, press the button for 3 seconds to enter the setting screen.



- •In the TRIP A screen, press the button to enter theTRIP B screen.
- Press the button for 3 seconds to reset Trip A record.









- •In the TRIP B screen, press the button to enter the Fuel screen.
- •Press the button for 3 seconds to reset Trip B record.







•In the Fuel screen, press the button to enter the Clock screen.



•In the Clock screen, press the button to enter the temperature screen.



•In the temperature screen, press the button to enter the voltage screen.

NOTE When the function is turned on, it will only be displayed on the screen.



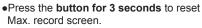
•In the voltage screen, press the button to enter the MAX screen.

NOTE When the function is turned on, it will only be displayed on the screen.



●In the Max. temp. screen, press the button to go back to the total mileage screen.

NOTE When the temperature function is turned off, the Max. speed record screen is displayed.







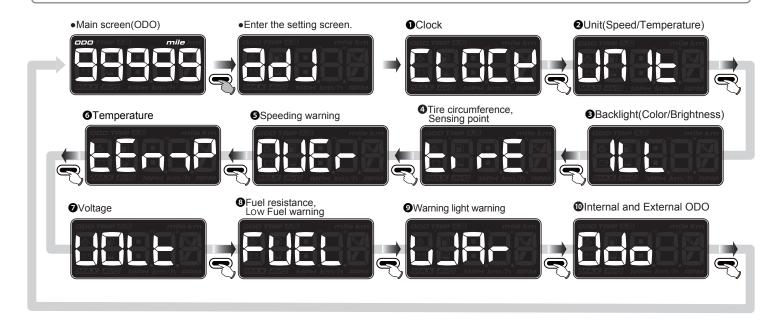


•In the total mileage screen.

5 Setting Screen Switching Description

- Press the **button for 3 seconds** in the main screen(ODO) to switch to the setting screen.
- •Press the button to select
- Clock ② Unit(Speed/Temperature) ③ Backlight(Color/Brightness) ④ Tire circumference, Sensing point ⑤ Speeding warning ⑥ Temperature
- **②**Voltage **③**Fuel resistance, Low Fuel warning **④**Warning light warning **⑥**Internal and External ODO

NOTE During setting, if no button is not pressed for 30 seconds, it will automatically return to the startup screen.



Clock Setting



•In the Clock screen, press the button for 3 seconds to enter the Clock setting.







•Example : Changing to 12H.

• Press the button to choose the setting option.

Now the setting value is flashing.

NOTE Setting range: 12 H, 24 H. Default value: 24 H.



•EX: Set time format from 24 H to 12 H.

• Press the button for 3 seconds to enter time adjustment hour setting.



•Example: To set clock(hour) to 10 hours.

•Press the button to choose the setting number.

Now the setting value is flashing.

NOTE Cursor moving order is : $Hour \to Digit \ in \ ten \ minutes \to$ Digit in minutes

NOTE Setting range : 1~12(12H) 0~23(24H) Default value : 12(12H)/0(24H)



•EX: Set hour from 12:00 AM to 10:00 AM.

 Press the button for 3 seconds to enter clock adjustment minute setting.



Press the button for 3 seconds

to move to the digit you want to set.

•EX: To set clock(minute) as 10 minutes.

Now the setting value is flashing.

NOTE Setting range: 00~59 minutes. Default value: 0.



 Press the button to choose the setting number.



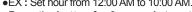
•EX: Set minute from 0 minutes to 10 minutes. •Press the button for 3 seconds to go back

to the Clock screen.



•The Clock screen.







5-2 Unit (Speed, Temperature) Setting



•In the unit screen, press the button for 3 seconds to enter the speed unit setting.









Example : To set speed unit in km/h.

 Press the button to choose the setting options.

Now the setting value is flashing.

NOTE Setting range : km/h, MPH. Default value : MPH



EX : Set speed unit from MPH to km/h.

 Press the button for 3 seconds to enter the temp. unit setting screen.



•Example : To set temp. unit to °C.

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

Now the setting value is flashing.

NOTE Setting range: °C (Celsius) and (Fahrenheit). Default value : °F (Fahrenheit).



•EX : Set temp. unit from °F (Fahrenheit) to °C (Celsius).

 Press the button for 3 seconds to go back to the unit screen.



The unit screen.



5-3 Backlight Setting(Color/Brightness)



•In the backlight(Color/Brightness) screen, press the button for 3 seconds to enter the backlight color setting.





•Example: To set backlight color to yellow.

•Press the button to choose the color.

Now the setting value is flashing.

NOTE Setting range: white, red, orange, yellow, green,blue, light blue, purple Default value : White.

NOTE The backlight color will change immediately after you set the value



•EX : Set backlight color from white to yellow.

• Press the button for 3 seconds to enter the backlight brightness setting.



•Example: To set the backlight brightness at 2/3.

Press the **button** to choose the setting number

Now the setting value is flashing.

NOTE Setting range 1/3(Darkest)~ 3/3(Brightest). Default value: 1/3.

NOTE The backlight brightness will change immediately after you set the value.



•EX: The backlight brightness setting is changed from 1/3 to 2/3.

Press the button for 3 seconds to go back to the backlight(Color/Brightness) screen.



•The backlight(Color/Brightness) screen.



•In the tire circumference and sensing point screen, press the button for 3 seconds to enter the tire circumference and sensing point setting

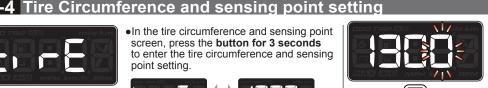


⚠ CAUTION!

 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 you enter the setting.

A Reset this setting value if you change to a different tire size.



 EX : Set the tire circumference value from 1,000 mm to 1,300 mm.

 Press the button for 3 seconds to enter the sensor point setting.



Example : To set the sensor point value to 06 P

 Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.



NOTE Setting range: 01 P~20 P. Default value: 01 P.



• Press the button to choose the setting



•Example: If the tire circumference is 1,300 mm.

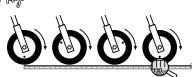
• Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.

NOTE Setting range: 300~2,500 mm. Default value: 1,000 mm.



 You can use the tire valve as the starting point and the terminal point to measure the wheel circumference with a measuring tape.



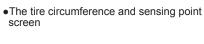


Press the button to choose the setting



•EX : Set the sensor point value from 01 P to 06 P.

 Press the button for 3 seconds to go back to the tire circumference and sensing point screen.



5-5 Speeding Warning Setting



• In the speeding warning screen, press the button for 3 seconds to enter the speeding warning setting.





- Example : To set speeding warning value to 51 MPH.
- Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.

NOTE Setting range: 30~160 km/h (19~100 MPH)

Default value: 60 km/h (38 MPH).



• Press the button to choose the setting number.



- •EX : Set speed warning value from 38 MPH to 51 MPH.
- Press the button for 3 seconds to go back to the speed warning screen.



• The speeding warning screen.

5-6 Temperature Setting



•In the temperature screen, press the **button for** 3 seconds to enter the temperature setting.







- Example : To set temperature function
- Press the button to choose the setting

Now the setting value will blink.

NOTE Settings range : ON, OFF. Default value : OFF.



- •EX : Set temperature function from OFF to ON.
- the overheat warning setting.



- •Example: To set overheat warning value to 248 °F.
- •Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.

NOTE Setting range : 60 ~250 °C (140 ~482 °F) Default value : 90 °C(194 °F)

• Press the button for 3 seconds to enter



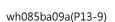
 Press the button to choose the setting number.



- •EX : Set overheat warning value from 194 °F to 248 °F.
- Press the button for 3 seconds to go back to the temperature screen.



•The temperature screen.



5-7 Voltage Setting



In the voltage screen, press the button for 3 seconds to enter the voltage setting.









 Press the button to choose the setting number.





Example : To set voltage function to ON

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

Now the setting value will blink.

NOTE Settings range : ON, OFF. Default value : ON.



EX : Set low voltage warning value from DC 11.5 V to DC 11.0 V.

• Press the button for 3 seconds to go back to the voltage warning screen.





•EX : Set voltage function to ON

 Press the button for 3 seconds to enter the low voltage warning setting.



The voltage screen.



Example : To set low voltage warning value to DC 11.0 V.

•Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.

NOTE Setting range : DC 8.0~13.0 V. Default value: DC 11.5 V.







•In the fuel screen, press the button for 3 seconds to enter the fuel gauge resistance setting.





•Example : To set low fuel warning value to 30%.

•Press the button to choose the setting number.

Now the setting value is flashing.

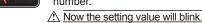


NOTE Setting range : 0~30%. Default value: 10%



Example: If the vehicle is a 2002 Road King, its resistance is 250 Ω according to the service manual.

 Press the button to choose the setting number.



NOTE Settings range : $100~\Omega$, $250~\Omega$, $270~\Omega$, $390~\Omega$, $510~\Omega$, $1200~\Omega$, SW, Custom, OFF. Default value: 100 Ω.

When the fuel wire is not connected, the fuel meter will display --%.



•EX : Set low fuel warning value from 10% to 30%.

• Press the button for 3 seconds to go back to the fuel screen.



The fuel screen.



 \bullet EX : Set fuel gauge resistance value to 100 $\Omega.$

 Press the button for 3 seconds to enter the low fuel warning setting.

If the setting is Custom, it will enter the 5-8-2 (auto) and 5-8-3 (manual) operation setting.

5-8-2 Fuel Gauge Resistance Setting (Auto Detection)



 Press the button for 3 seconds to enter the fuel gauge resistance setting(auto detection).

⚠ CAUTION!

- Before detection, ensure that your current fuel level is in the lowest position that you would like to have.
- Stop the vehicle for a few seconds to allow the fuel surface to become steady, then start the detection of the resistance.

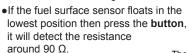


The highest position)

•If the fuel surface sensor floats in the highest position then press the button, it will detect the resistance around 10 Ω .







The lowest position







- •EX : Auto Detection the highest fuel level resistance value is 10 Ω .
- Hold and press the button 5 times to enter the low fuel warning setting.





- •EX : Auto Detection the lowest fuel level resistance value is 90 Ω .
- Hold and press the button 5 times to enter the highest fuel level resistance auto detection screen.

-8-3 Fuel Gauge Resistance Setting (Manua



•In the fuel gauge resistance setting(auto detection), press the button for 3 seconds to enter the fuel gauge resistance setting (manual).



- •Example: To set the highest fuel level resistance value as 10 Ω .
- Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.



- •Example: To set the lowest fuel level resistance value as 90 Ω .
- •Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.



 Press the button to choose the setting number.

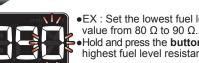


 Press the button to choose the setting number.





- •EX : Set the lowest fuel level resistance
- Hold and press the **button twice** to enter the highest fuel level resistance setting.





- •EX : Set the highest fuel level resistance value to 10 Ω .
- Press the button for 3 seconds to enter the low fuel warning setting.



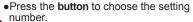
5-9 Warning Light Setting



•In the warning light screen, press the **button** for 3 seconds to enter the warning light setting.







Press the button for 3 seconds to confirm selection.

Now the setting value is flashing.



NOTE Setting range : Low Fuel(LFUEL), Low voltage(VOLT), Overheat(TEMP) Default value : Low Fuel(LFUEL).



- •Press the SELECT button to choose the setting number.
- Press the button for 3 seconds to go back to the warning light screen.

Now the setting value is flashing.

NOTE Setting range : Slow Flash(S), Fast Flash(F),Lit.(L), OFF Default value : Slow Flash(S)



The warning light screen.

5-10 Internal and External ODO Setting

Internal ODO



•In the internal and external ODO screen, press the button for 3 seconds to enter the internal and external ODO setting.







 Press the button for 3 seconds to enter the internal ODO screen.









- Press the button for 3 seconds to go back to the internal and external ODO screen
- internal ODO

NOTE Display range :0 ~ 99,999 km (mile).



•The internal and external ODO screen.

External ODO



•In the internal and external ODO screen, press the button for 3 seconds to enter the internal and external ODO setting.







•Press the button for 3 seconds to enter the external ODO setting.







- Example : To set external total distance value to 12,500 km.
- Press the button for 3 seconds to move to the digit you want to set.

Now the setting value is flashing.

NOTE Cursor's order : one hundred

thousand→ten thousands→thousand →hundred→ten→digit.

NOTE Setting range:

0~99,999 km (mile)



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



- •EX : Set external total distance value from 00,000 km to 12,500 km.
- Press the button for 3 seconds to go back to the internal and external ODO screen.



The internal and external ODO screen.



6 Troubleshooting

The following situations do not indicate malfunctions of the product. Check the following before taking it in for repair.

Trouble	Check item	Trouble	Check item
The meter doesn't work when the power is on.		Fuel meter doesn't display or display error.	
The meter shows wrong information.	Check the voltage of your battery, and make sure the voltage is over DC 12 V.		→Check the settings menu if the fuel settings are correct.
Speed meter doesn't appear or appears incorrectly.	 May be poor connection of the speed sensor. → Check if the speed sensor is connected correctly. Check the setting. → Refer to the manual 5-4 Tire circumference, Sensor point setting. 	The clock is incorrect.	 Check the setting. → Check the settings menu if the clock settings are correct. May be due to the reversed power line. → Check if the positive wire(Red) connects to the battery(DC 12 V), and main switch positive wiring(Brown)
Thermometer doesn't appear or appear incorrectly.	•Make sure the temperature wire is connected properly. →Check if the temperature wire is connected correctly. •Check the setting. →Refer to the manual 5-6 Temperature setting.	The meter indicator doesn't display.	connects to the main switch(DC 12 V). •May be poor connection of the harness. →Make sure the wires are connected correctly.

 $\ensuremath{\mathbb{X}}$ If the problems still cannot be solved, contact our technical department for assistance.