

# INSTRUCTIONS



Thank you for purchasing KOSO's Harley Davidson Volt meter. Before operating this unit, please read the instructions thoroughly and retain then for future reference.

#### **Notice**

- 1. This meter only function with DC 12V.
- 2. Any damages caused by faulty installation shall be imputed to the users.
- 3. To avoid a short circuit from occuring, do not pull or modify the wires during installation.
- 4. Dissasembling this unit will void your warranty. Maintenance and repairs should be executed by professionals only.

#### SYMBOL MEANING:

∧ Some procedures must be followed in order to avoid faulty installation

**AWARNING!** Some procedures must be followed to avoid damages from occuring to yourself and others. A CAUTION! Some procedures must be followed to avoid damages from occuring to the vehicle



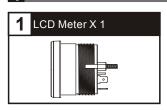






LIGHT ON PRESS THE BUTTON ONE TIME FLASH

## 1 Accessories

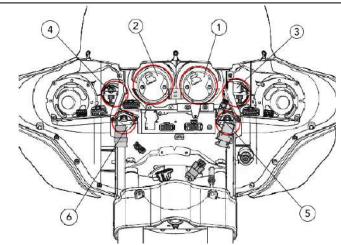






Please contact your local distributor if the items received are not the same as the items listed above.

## 2-1 Gauge location





- ① HD-02S 4" Speedometer ③ HD-02T 2" Ambient Temp. Meter ④ HD-02V 2" Voltage Meter
- 2 HD-02R 4" Tachometer
- ⑤ HD-02F 2" Fuel Meter
- 6 HD-02P 2" Oil Pressure Meter

NOTE Gauge positioning and identication for 2004-2013 Harley-Davidson FLHT / FLHX / FLTR. For any other models, refer to the service manual

#### 2-2 Disassembling Instructions



- 1.Disconnect the ground (-) (negative pole of the battery) from the vehicle's battery.
- 2. Remove the mounting screw and remove the fairing.



5. Remove the mounting hardware.



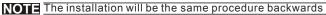
3.Disconnect the headlight connector.



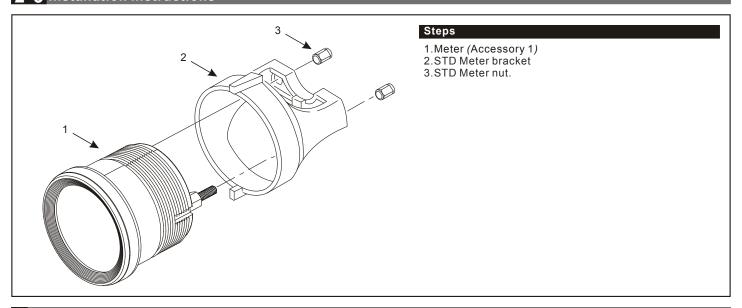
- 6. Remove the meter from the inner fairing.
- 7. Replace the meter with the new KOSO version.



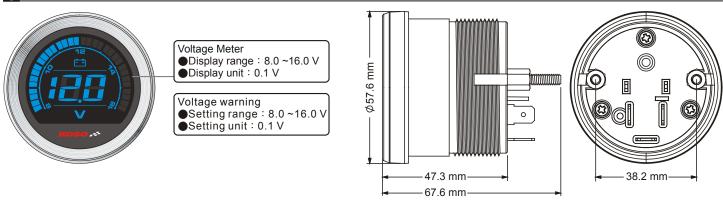
4. Disconnect the wiring from the speedometer, tachometer, ambient temp. meter, volt meter, fuel meter, and oil pressure meter.



## 2-3 Installation instructions



### **3** Overview



# **3-1** Settings instructions

●Voltage Meter	Display range: 8.0 ~16.0 V	●Effective temperature range	-10~60 °C
	Display unit: 0.1 V	<ul><li>Meter standard</li></ul>	JIS D 0203
○Voltage warning	Setting range: 8.0 ~16.0 V	●Meter size	D57.5 X 47.3 mm
	Setting unit: 0.1 V	■Meter weight	86 g
●Effective voltage	DC 12 V		

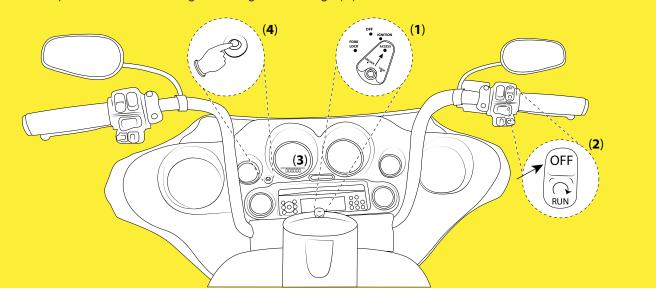
**NOTE** Design and specications are subject to change without notice!

NOTE Please be advised this meter was programmed according original factory parameters. If the vehicle has been modified or customized and the parameters have been change, then the meter display might not be accurate

NOTE The backlight adjustment (brightness and color) must be done through the Speedometer housing with the communication harness.

### 4 Entering the settings

- \* To enter the gauge settings mode, you must follow the steps below:
- A: The key must be switched to ON/ACCESSORIES (1).
- B: The Engine OFF/Run must be OFF (2).
- C: The speedometer must be displaying ODOMETER (3).
- D: Press and hold the Trip/Reset button down for 3 seconds to enter the settings (4).
- **E**: Use the Trip/Reset button to navigate through the settings (4).





☑ In the main screen, hold the button for 3 seconds to enter in the settings screen.



- EX. You want to set the Voltage warning at 15% to 25%.
- Press and hold the button for 3 seconds to enter back into the main screen.



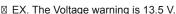


4-1 Voltage warning settings screen Press the button to change the settings









☑ EX. The Voltage warning is 13.5 V.☑ Press and hold the button for 3 seconds to move to the digit you want to set.

Now the default is flashing

NOTE Default:11.5 V

NOTE Setting range: 8.0 ~16.0 V





Back to the main screen.

# 5 Troubleshooting

The following situations do not indicate malfunction of the meter. Please check the following points, before taking it in for repairs.

3 3		
Trouble	Check item	
The meter doesn't work	☑ If there is no power being supplied to the meter.	
when the power is on.	☑ Make sure the wires are connected and that the wires and fuse are not broken.	
	☐ The battery is broken or the battery is too old to supply enough power (DC 12V) to make the meter work.	