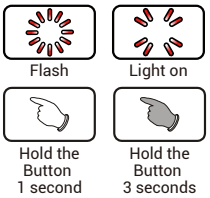
KOSO Feel The Speed

INSTRUCTIONS

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 below. 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 procedures must be followed to avoid damages to yourself, to the vehicle or to others.

1-1 Accessories

1 Speedo & Tachometer X1



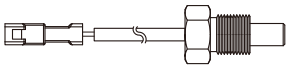
2 Fuel Gauge X1



3 Oil temp. Gauge X1



4 PT1/2-20UFN Sensor X1

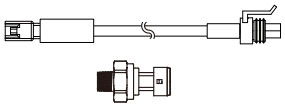


5 Extension Wire X1



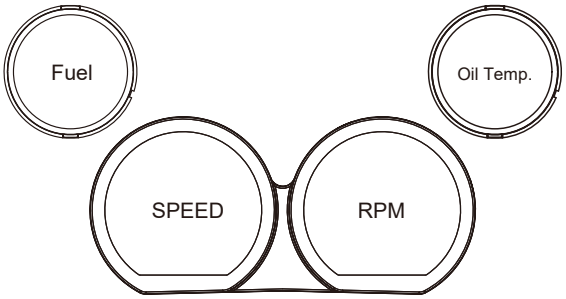
1-2 Optional accessories

1 Air pressure sensor kit 180 cm (BZ012000) x1

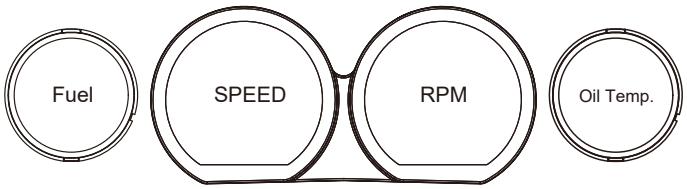


2-1 Gauge location

Road Glide | Harley-Davidson



Street Glide | Harley-Davidson

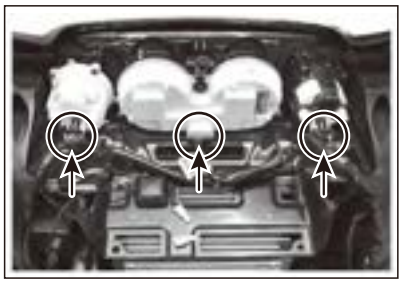


NOTE For installation of accessory 4, remove drain plug from oil pan and install oil temperature sensor in the same location. When installing oil temperature sensor, use a torque wrench to torque between 14 to 21 ft-lb (or 19 to 28.5 NM).

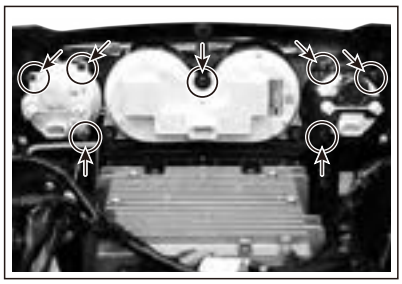
2-2 Disassembling Instructions



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



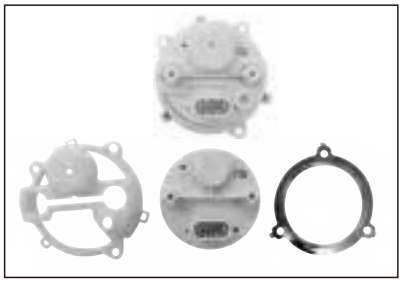
3.Disconnect the 3 gauges.



4.Remove the remaining 7 screws.



5.Ensure the Speed and Tach bezels remain in the fairing.



6.The Fuel and Volt bezels and mounting cups will be reused. There are 3 tabs on the bezels that need to be carefully pushed back through the mounting cup to separate the bezel from the mounting cup and to release the factory gauge.



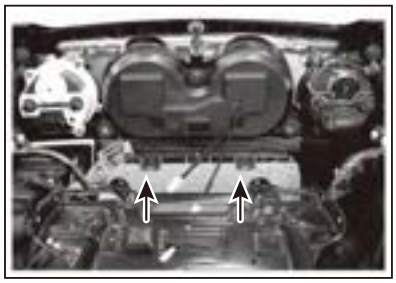
7.The new Oilt temp. gauge will use the existing white Volt mounting cup and the new Fuel Level gauge will use the existing black Fuel mounting cup. Place the new Volt and Oil temp. gauge in the appropriate housings and secure the bezel in place by lining up the tabs.



8.Remove the bushings and nuts from the original Speedometer and Tachometer.



9. Re-use the bushings and nuts to install the KOSO speed/ta - chometer

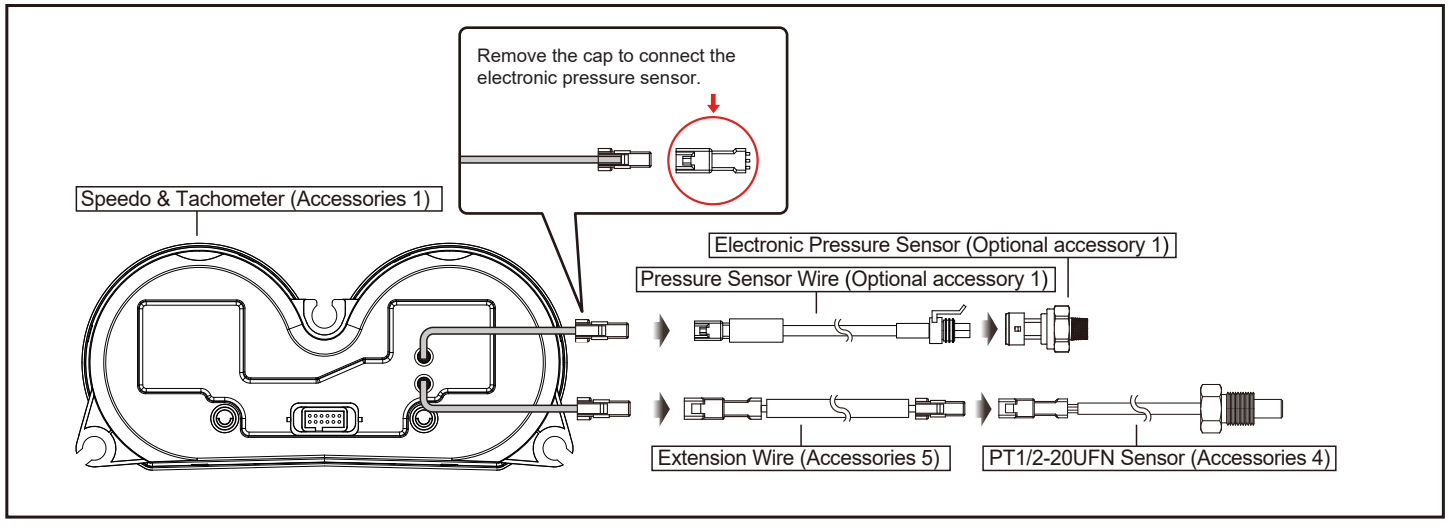


10.Reassemble the amplifier tray to the radio and speaker enclosures using the factory hardware; also give the top center Speed / Tach screw a final torquing with the gauge aligned to the fairing and amplifier tray.

Scan or click on the QR code.

Installation Video

2-3 Wiring Installation Instructions



3-1 Overview

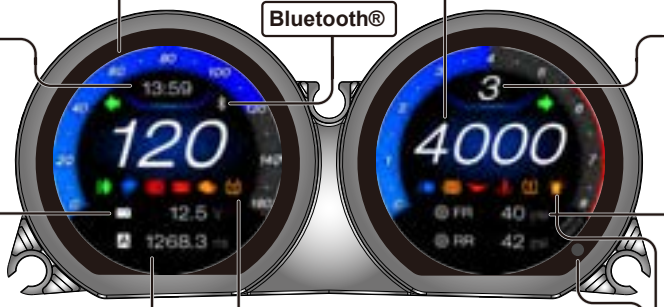
Speedometer
●Display range : 0 ~ 299 km/h (0 ~ 199 MPH) ●Display unit : 1 km/h (MPH)

Tachometer
●Display range : 0 ~ 8,000 RPM ●Display unit : 10 RPM

Clock
●Display range : 00:00~23:59 (24H)
01:00~12:59 (12H)

Bluetooth®

Gear meter
●Display range : -, N, P, R, 1~6



Voltmeter
●Display range : DC 8.0 ~ 18.0 V
●Display unit : DC 0.1 V

Tire pressure(TPMS, FR, RR, LR)
●Display range :---, Hi, 0~73 psi, 0~506 kPa, 0.0 ~ 5.0 bar
●Display unit : 1 psi, 1 kPa, 0.1 bar

Odometer
●Display range : 0 ~ 999,999 km (mile)
return to zero upon exceed.
●Display unit : 1 km (mile)

Trip meter A, B
Display range : 0.0~9,999.9 km (mile), may return to zero manually
Display unit : 0.1 km (mile)

Mileage maintenance
●Display range : -999~16,000 km (-999~10,000 mile), may reset manually.
●Display unit : 1 km (mile)

Indicator
●Left indicator light(Green)
●Fog Light (Green)
●Rain mode light (Blue)
●ABS light (Red)
●Voltage light (Red)
●Engine warning light (Amber)
●TCS light (Amber)

Indicator
●Right indicatior light (Green)
●Warning light (Green/Amber)
●TPMS light (Amber)
●Temperature warning light (Red)
●Oil pressure light (Red)
●VHC light (Amber)
●High beam light (Blue)
●IMMO anti-theft light(Red)
●Light sensing



Fuel gauge
●Display range : 0 ~ 100 %
●Display unit : 1 %



Oil temp. gauge
●Display range :
0 ~ 400 °F (32 ~ 248 °C)
●Display range : 1 °F (1 °C)

Oil temp.
●Display range : -40 ~ 300 °C
(-40 ~ 572 °F)
●Display unit : 1 °C (1 °F)

NOTE It will switch to engine temperature if the oil temperature sensor is not installed.

3-2 Display Mode Options

●You can switch the display mode via the app.

Digital



Analog



3-3 Settings Instructions

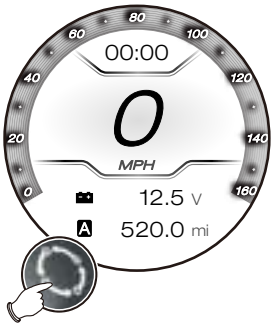
●Speedometer	Display range : 0~299 km/h (0~199 MPH) Display unit : 1 km/h (MPH)
●Odometer	Display range : 0~999,999 km (mile) and then return to zero Display unit : 1 km (mile)
●Current trip meter	Display range : 0.0~999.9 km (mile), automatically return to 0 after turning off the engine. Display unit : 0.1 km (mile)
○Trip meter A, B	Display range : 0.0~9,999.9 km (mile), may return to zero manually Display unit : 0.1 km (mile)
○Overspeed warning	Setting range : 30~299 km/h (20~199 MPH) Setting unit : 1 km/h (MPH)
○Current AVG Speed A, B	Display range : 0~299 km/h (0~199 MPH), automatically return to 0 after turning off the engine. Display unit : 1 km/h (MPH)
○Current top speed record	Display range : 0~299 km/h (0~199 MPH), automatically return to 0 after turning off the engine. Display unit : 1 km/h (MPH)
○Max. speed record	Display range : 0~299 km/h (0~199 MPH) Display unit : 1 km/h (MPH)
●Current riding time	Display range : 00:00~99:59, automatically return to 0 after turning off the engine.
●Mileage maintenance	Display range : -999~16,000 km (-999~10,000 mile), may reset manually. Setting range : 500~16,000 km (300~10,000 mile) , OFF Setting unit : 100 km (mile)
●Gear meter	Display range : -, N, P, R, 1~6
○Max. Gear record	Display range : -, N, P, R, 1~6,may return to zero manually
●Tachometer	Display range : 0~8,000 RPM Display unit : 10 RPM
○Shift light warning	Setting range : 1,000~8,000 RPM Setting unit : 100 RPM
○Max. rotating speed	Display range : 0~8,000 RPM, may return to zero manually
●Horsepower	Display range : 8.8~200.0 HP (6.5~149.2 kW)
●G-Force	Display range : 0~2.0 G Display unit : 0.1 G
●Thermometer	Display range : 32~248 °C (0~400 °F) Display unit : 1 °C (°F)
○Overheat warning	Setting range : 60~250 °C (140~482 °F), when setting value is reach, texts will turn red as a warning. Setting unit : 1 °C (°F)
●Cylinder Head Temperature Gauge	Display range : -40~300 °C (-40~572 °F) Display unit : 1 °C (°F)
○Max. temperature record	Display range : -40~300 °C (-40~572 °F) ,may return to zero manually Display unit : 1 °C (°F)
●Air thermometer	Display range : -20~60 °C (-4~140 °F) Display unit : 1 °C (°F)
●Fuel gauge	Display range : 0~100% Display unit : 1%
○Fuel warning	Setting range : HD Standard (greater than 211Ω, and will turn off smaller than 187Ω),Customize (lower then 20%, and will turn off higher than 30%) , when setting value is reach or below, warning light will lit.
●ØCONS	Display range : 0.0~99.9 (L/100km, km/L) / 0.0~999.9 (MPG(US), MPG(UK)) Display unit : L/100km, km/L, MPG(US), MPG(UK)
●Remaining Mileage	Display range : 0~9,999 km (mile) Display unit : 1 km (mile)
○Remaining Mileage warning	Display range : "LO" will be displayed when value is below 16 km (10 mile) .
●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
●Shock pressure gauge	Display range : ---, 0 ~ 150 psi, 0~1034 kPa, 0.0 ~ 10.3 bar Display unit : 1 PSI, 1 kPa, 0.1 bar
○Shock pressure gauge calibration	Display range : 0 ~ 25 psi±1 psi Display unit : 1 psi
●Tire pressure	Display range :---, Hi, 0~73 psi, 0~506 kPa, 0.0 ~ 5.0 bar Display unit : 1 psi, 1 kPa, 0.1 bar
●Altitude	Display range : 0~10,000 m (0~32,800 ft)
●Compass	Display range : N, NE, E, SE, S, SW, W, NW
●Angle	Display range : 0~360°
●DTC diagnosis	Display range : Six-digit error code
●Target speed	Setting range : 30~290 km/h (20~180 MPH) Setting unit : 5 km/h (MPH)
●Target distance	Setting range : 50~1,500 m (1/32~30/32 mile) Setting unit : 50 m (1/32 mile)
●Top speed	Display range Speed :0~299 km/h (0~199 MPH) Distance : 0~999 m (0~3,280 feet) Rotating speed : 0~8,000 RPM Time : 0~9 : 59”99
○Best performance indication sign	Display range : The indication sign is displayed for the shortest time.
●Starting animation	Display range : 3 seconds
●Mobile phone connection status	Display range : Steady(connected), OFF(Not connected)
●Background display	Setting range : Auto(automatically switch according to the light : day mode display for the bright environment and Night mode display for the dark environment), Day mode, Night mode.
○Back light brightness (Day)	Setting range : 1/5~5/5(Brightest) Setting unit : 1/5
○Back light brightness (Night)	Setting range : 1/5(Darkest)~5/5(Brightest) Setting unit : 1/5
○Backlight color	Setting range : white, red, orange, yellow, green, blue, purple
●UI style	Setting range : Analogue, Digital
●Unit	Speed unit : km/h , MPH Temperature unit : ˚C (Celsius) and ˚F (Fahrenheit) CONS unit : L/100km, km/L, MPG(US), MPG(UK) Tire pressure unit : PSI, kPa, bar
●language	English (Extensive functions of Bluetooth are displayed based on the language transmitted by the mobile phone)
●Voltage	DC 12 V
●Operating temperature	-20~ 85 °C
○Storage temperature	-30~ 90 °C
●Specification	JIS D 0203 (S2)
●Meter Weight (Speedo & Tacho)	320 grams
○Meter Weight(Oil Temp.)	83 grams
○Meter Weight(Fuel Level)	83 grams
●Indicator	Left indicator light(Green) Low fuel warning light (Amber) Cruise light (Green/Amber) Fog Light (Green) Rain mode light (Blue) Engine warning light (Amber) ABS light (Red) TCS light (Amber) VHC light (Amber) High beam light (Blue) Warning light (Green/Amber) Oil pressure light (Red) Voltage light (Red) Temperature warning light (Red) TPMS light (Amber) Right indicatior light (Green) IMMO anti-theft light(Red) Light sensing

NOTE Design and specifications may change without further notice.

NOTE G-Force, air thermometer, altitude, compass and angle functions require connection to an app to operate.



●In the total mileage screen, press the **(T) button once** to switch to Trip A screen.



●In theTrip A screen, press the **(T) button once** to switch to Trip B screen.

●Hold the **(T) button for 3 seconds** to clear the Trip A recordings.

A 520.0 mi	A 0.0 mi



●In the Trip B screen, press the **(T) button once** to switch to the mileage maintenance screen.

●Hold the **(T) button for 3 seconds** to clear the Trip B recordings.

B 520.0 mi	B 0.0 mi



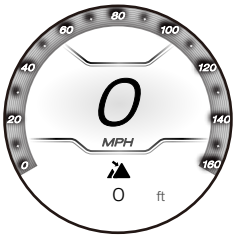
●In the mileage maintenance screen, press the **(T) button once** to switch to the remaining mileage screen.

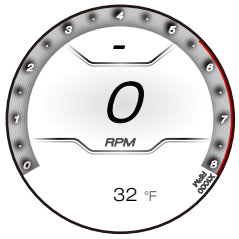
●Hold the **(T) button for 7 seconds** to reset the mileage maintenance.

-999 mi	300 mi









●In the MAX. record screen, press the **(T) button once** to switch to the total mileage screen.

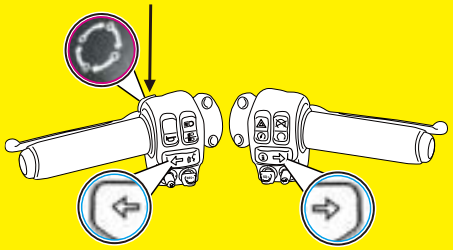
●Hold the **(T) button for 3 seconds** to clear the MAX. record.



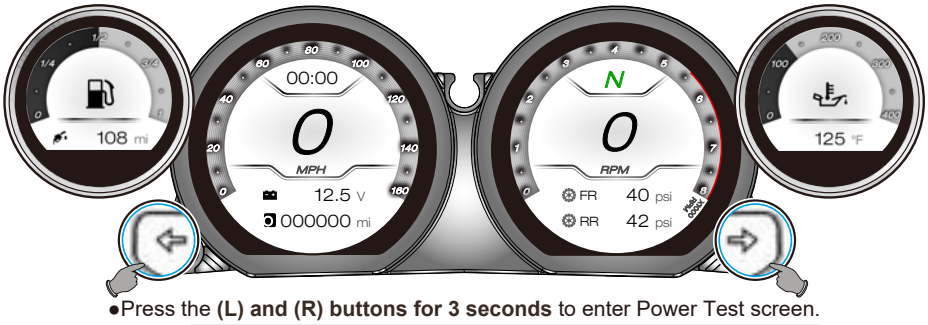
●Total mileage screen.

Power Test

Trigger switch(T)
Located in front of the left handle

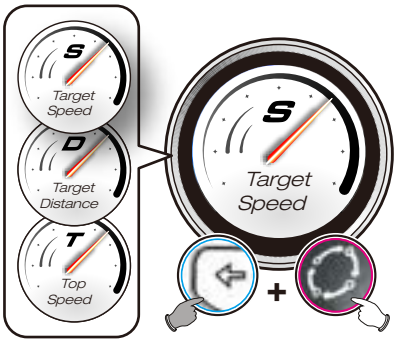


Left turn signal(L) **Right turn signal(R)**

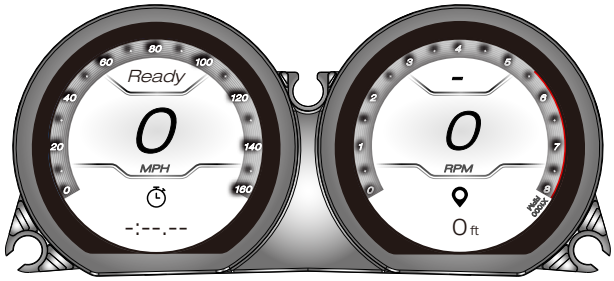


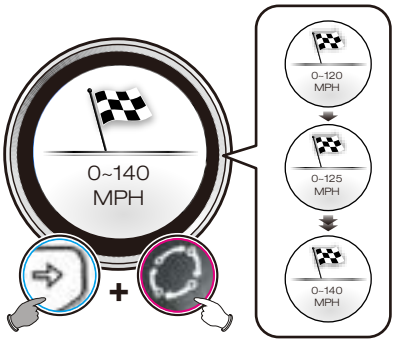
●Press the **(L) and (R) buttons for 3 seconds** to enter Power Test screen.

NOTE Operation is also supported through the KOSO app.

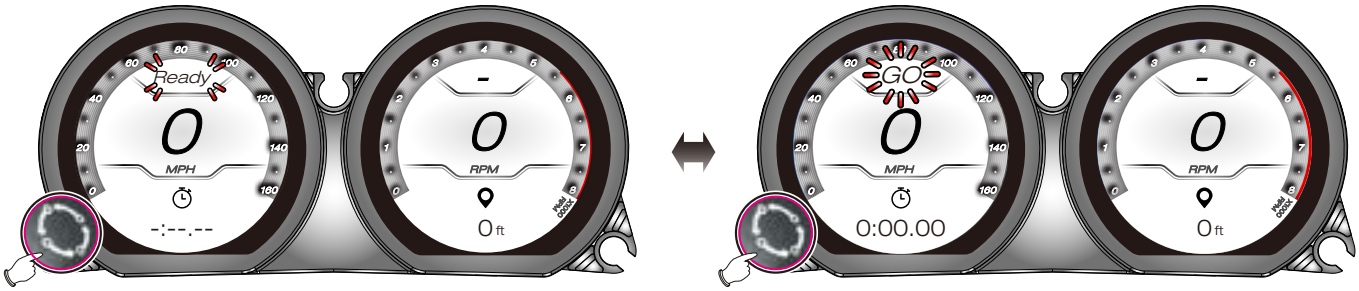


●In the Power Test screen, press and hold the **(L) button and briefly press the (T) button** to switch between Target Speed, Target Distance, and Top Speed.

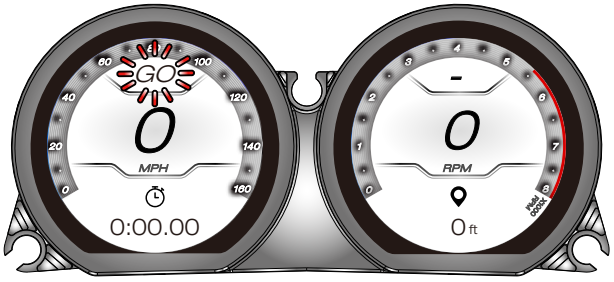




●In the Power Test screen, press and hold the **(R) button and briefly press the (T) button** to switch test conditions.

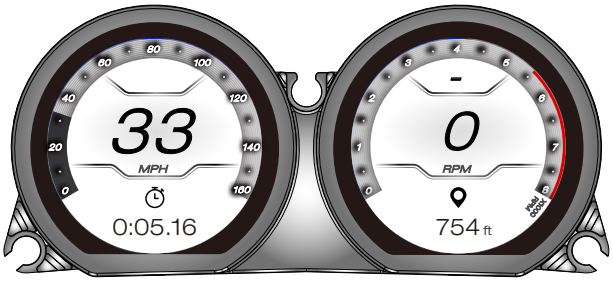


●Press the **(T) button** to toggle between Ready state and Go state.



●In the testing screen.

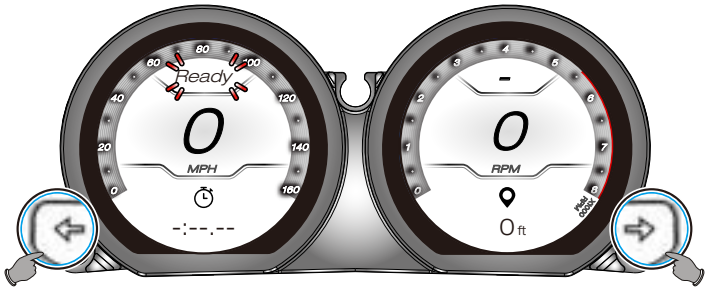
⚠WARNING! Use this function on racetracks to avoid accidents.



●When the bike moves, the timer will start automatically.



●When you reach the target speed that you set (0~140 km/h), the timer will stop.
●Press the **(T) button** to go back to Ready state.



●Press and hold the **(L)button and (R) button for 3 seconds** to exit the Power Test screen.

NOTE You can only exit the Power Test screen when in the Ready state.

4-2 Link to App Installation

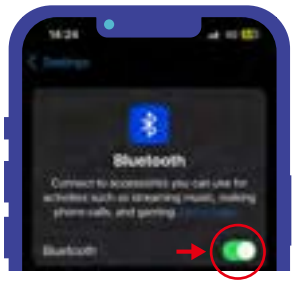
●This product may be used in combination with the exclusive KOSO App; scan the QR code below or search KOSO - K Link in the App store for downloading and installation.

iOS
Android

Ios or Android

KOSO - K Link

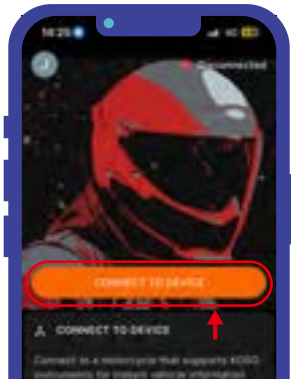
Scan the QR code below or search KOSO - K Link.



Turn on Bluetooth on your phone.



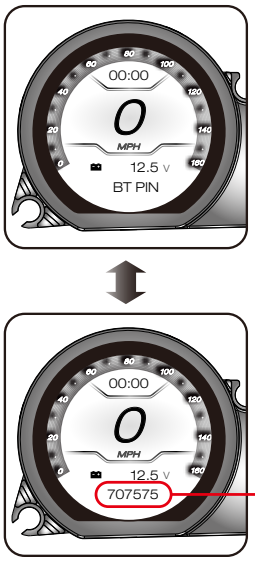
Tap the app to open it.



Tap the "CONNECT TO DEVICE" button.



Select the target device to begin configuration.





Enter PIN code.
(First-time login steps. After that, you'll be auto-connected without needing a PIN.)



Go into each option to configure the settings.
(Ex : Home,Display,Pre-set,Performance,Diagnostics.)

NOTE You may directly use the App to change the setting of the meter.

⚠ The images are for reference only. Refer to the latest downloaded version of the app for the interface.

⚠ "The Company is committed to optimizing the Bluetooth® application function of the meter. However, as supports for software and hardware are different as mobile phones differ, the Bluetooth® application function of the meter may be affected, causing differences in functions."

Scan or click on the QR code.

Operation Setting Video Complete Manual

5 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 gauge doesn't work when the power is on.	●The power isn't supplied to the meter. →Make sure the wiring is connected. The wiring and fuse are not broken. →The battery is too old to supply needed power (DC 12 V).	**Fuel gauge does not display or display error.**	**●Check your fuel tank.** **●Make sure the wiring harnes. is connected properly.**
The gauge shows incorrect information or keeps performing system reboot.	**●Check the voltage of your battery and make sure the voltage is over DC 12 V.**	Temperature gauge does not display or display error.	●Make sure the temperature sensor is connected properly.
Speedometer does not display or display error.	●Check in the settings menu to see if the settings speed are correct.	**Bluetooth connection is abnormal or displays an error.**	**●Bluetooth may be experiencing interference from other similar devices.** **→ Restart your smartphone and reconnect.**

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

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