

# KMG-30 Instruction Manual



## CONTENTS

- I、Gauge and Accessories in Package .....01
- II、Installation Steps .....01
- III、Appearance Parameter .....03
- IV、Electronic Parameter .....03
- V、PINS Definition .....03
- VI、KMG-30 Usage .....04
- VII、Modify system Settings .....05
- VIII、Menu Diagram Setting .....06
- IX、NMEA2000 & J1939 Parameter Group Number (PGN).....07

www.kusauto.com

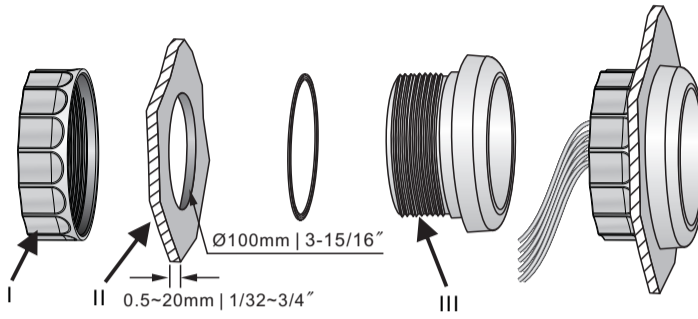
KMG-30 is a multi-functional round LCD instrument, which can display multi-kinds of data at the same time: RPM, speed, fuel level, water temperature, oil pressure, hour meter, and it supports NMEA 2000, J1939, and analog signal input.

### I、Gauge and Accessories in Package

KMG-30 instrument, CAN-BUS cable, Analog signal cable, GPS antenna and Instruction manual.

### II、Installation Steps

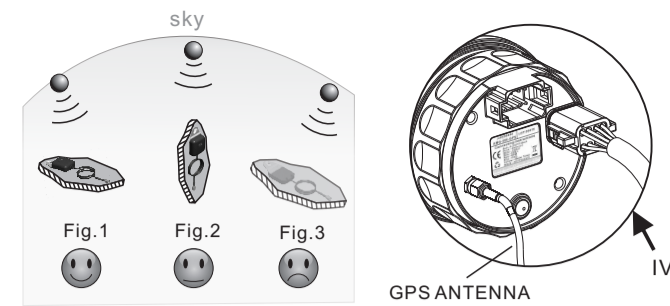
1. Drill a 100.5mm (3 15/16") hole on the panel (II) and make sure a clearance of 80mm (3 1/4") on the backside of the panel exists for KMG-30 gauge.
2. Remove fastening ring (I), insert KMG-30 gauge from front side, and use the fastening ring (I) to fix the gauge (III) after position adjustment.
3. Connect wires and GPS cable to meter (IV).
4. Connect the cable to the connector hole on the backside of KMG, the other end connects with NMEA2000 network. If you chose analog signal input, the pin of analog signal input needs to be connected with sensor.



01

www.kusauto.com

### GPS Antenna Installation:

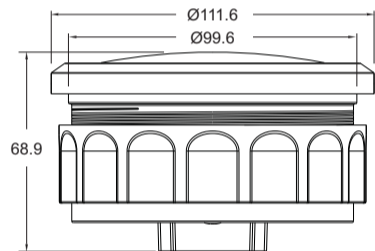


5. Install the GPS antenna outdoors and ensure that GPS antenna receiving signals faces the sky, as shown in Fig.1; If the GPS antenna is installed as shown in Fig.2, the reception of GPS signal will be impacted; If the GPS antenna is installed as shown in Fig.3, it will have a negative impact on the GPS signal and it will not be received.
6. It takes about one minute for the instrument to receive the satellite signal when powered on. Normally when the signal is strong, the location can be completed within 40 seconds (the initial positioning may take 1-2 minutes). Once the boat moves, and the pointer will move and show relative speed over ground (SOG). All the data will not change when the boat stops, so the pointer cannot be used for reference. All data will become accurate once the boat moves.

www.kusauto.com

### III、Appearance Parameter

1. Dimension : 3.0 inch
2. Resolution : 432\*432 pixels
3. Mounting Dimension : φ100.5 mm
4. Appearance Dimension : φ111.6 mm

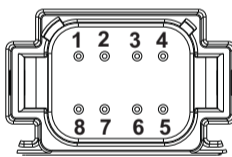


### IV、Electronic Parameter

1. Working voltage : 9 ~ 32 VDC
2. Working current : ≤170mA (12V)
3. Working temp. : -30~+85 °C(-22°F~+185°F)
4. Storage temp. : -30~+85 °C(-22°F~+185°F)

### V、PINS Definition

1. 4 cores cable red wire-RPM
2. 4 cores cable blue wire-Fuel Level
3. 4 cores cable yellow wire-Water Temp.
4. 4 cores cable black wire-Oil Pressure
5. 2 cores cable red wire-Battery(+)
6. 2 cores cable black wire-Battery(-)
7. CAN-H
8. CAN-L



### VI、KMG-30 Usage

1. "MODE" button: confirmation
2. ▲ button: Move up/add
3. ▼ button: Move down/reduce
4. Value Setting Page, keep press ▲ button: add 10
5. Value Setting Page, long press ▼ button: reduce 10
6. Click "MODE" on the home page to enter the Settings page.
7. When locked, you need to type the correct password to enter the Settings page. The initial password is 1234
8. On the password input page, the "MODE" button is used to move the cursor to the next password, and the "up" and "down" button are to increase or decrease the values of the current cursor.

\*Note: when using analog signal input, please pay attention to the insulation at the end of the unused analog signal cables. It is strictly forbidden for the power cord and signal line to touch together.

03

www.kusauto.com

04

### VII、Modify system Settings

1. Modify Display Style : Setting → Display Setting → Style Setting
2. Modify RPM Range : Setting → Display Setting → RPM Setting
3. Modify Locking Password: Setting → Lock Setting → Reset Password
4. Modify Locking Time: Setting → Lock Setting → Lock Time
5. Modify GPS Speed Units :  
Setting → Display Setting → GPS Setting → Unit Setting
6. Modify the GPS Signal Source :  
Setting → Display Setting → GPS Setting → Signal Setting
7. Modify Fuel Level, Water Temp., Oil Pressure Alarm Value :  
Setting → Alarm Setting
8. Modify Signal Input : Setting → Input Select
9. Modify Signal Settings : Setting → Input Setting
10. When set to style 3, it will have below four analog signal input; Resistance value can be customized.
  - a. Fuel level(0 ~ 190 or 240 ~ 33ohm) / Trim(0 ~ 190 or 160 ~ 10ohm)(Choose one of two)
  - b. Oil pressure alarm(Switching signal, low alarm)
  - c. Water Temperature(Switching signal, low alarm)
  - d. Speed ratio: (0.5-250.0)

www.kusauto.com

### VIII、Menu Diagram Setting

Setting	Display Setting	Style Setting	Style 1/Style 2/Style 3	
		RPM Setting	4K/6K/8K	
		Color Setting	White/Black	
		GPS Setting	GPS Antenna	
			NMEA2000 Network	
			Unit Setting	Speed Unit: knots/(km/h)/MPH Temp. Unit: Celsius/Fahrenheit Pressure Unit: Bar/PSI
		Brightness	10%~100%	
	Alarm Setting	Fuel Level	0~100%	
		Water Temp	40~120°C/100~250°F	
		Oil Pressure	0~10bar/0~145psi	
	Input Select	NMEA 2000		
		J1939		
	Input Setting	ANALOG		
		Instance	Engine Instance	0-15
			Fuel Instance	0-15
Fuel Level			0-190 ohm	
			240-33 ohm	
Water Temp.			Customized	
			301-23 ohm	
Oil Pressure			Customized	
		10-185 ohm		
Ratio Setting		Customized		
		0.5-250		
Lock Setting	Reset Password			
	Lock Time			
	Lock ON/OFF			

### IX、NMEA2000 & J1939 Parameter Group Number (PGN)

#### NMEA2000

PGN	PGN name	DD#	Field Name
127488	Engine Parameters	129	Engine Speed
127505	Fluid Level	208/215	Fluid Type/Fluid Level
		049	Engine oil pressure
127489	Engine Parameters	043	Engine temp.
		132	Total engine hours

#### SAE-J1939

PGN	PGN name	SPN	Parameter Name
61444	Electronic Engine Controller 1	190	Engine Speed
65276	Dash Display	96	Fuel Level
65263	Engine Fluid Level/Pressure 1	100	Engine Oil Pressure
65262	Engine Temperature 1	110	Engine Coolant Temperature
65253	Engine Hours	247	Engine Total Hours of Operation

**KUS**

Since 1984

www.kusauto.com



06

www.kusauto.com

07

www.kusauto.com