



KMG-30 说明书

KMG-30 Instruction Manual



历史版本/History Version

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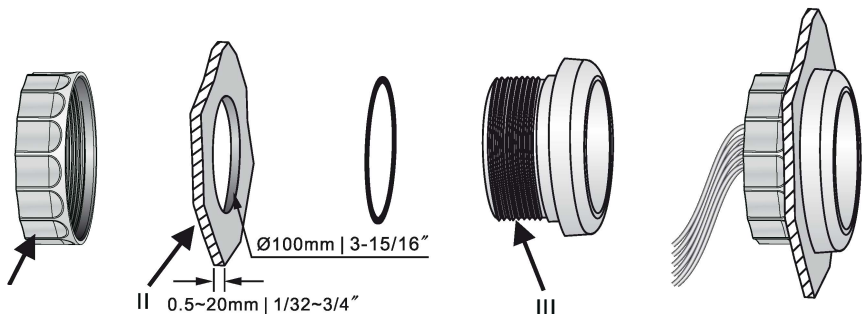
KMG-30是一款多功能的圆形液晶显示仪表，可以同时显示多种数据：转速、速度、油位、水温、油压、小时计，支持NMEA2000信号、J1939信号及模拟信号输入。

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 and hour meter, and it supports NMEA 2000 signal、 J1939 signal and analog signal input.

一、包装内含物/Gauge and Accessories in Package

KMG-30、CAN-BUS线缆、模拟信号线缆、GPS天线、说明书各1件。

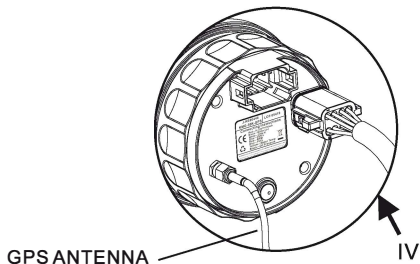
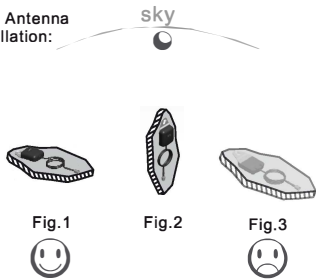
KMG-30 instrument, CAN-BUS cable, Analog signal cable, GPS antenna and Instruction manual.



安装说明/Installation Steps

- 在仪表板(II)上开一个直径为 $\Phi 100.5\text{mm}$ (3 15/16") 的孔, 并确保仪表板后面至少要有80mm (3 1/4") 的空间来放置表。
Drill an 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 for KMG-30 gauge.
- 去掉固定圈 (I), 从前面放入仪表, 调整好位置后用固定圈 (I) 锁紧仪表 (III)。
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.
- 将线束和GPS 线连接到仪表上 (IV)。
Connect wires and GPS cable to meter (IV).
- 将线缆连接到仪表背后的连接器孔, 另一端连接到NMEA2000网络。如果选择模拟信号输入时, 需要将模拟信号输入引脚连接到传感器。
Connect the cable to the connector hole on the backside of KMG, the other end connects with NMEA2000 network. If chose analog signal input, it needs to connect pin of analog signal input with sensor.

GPS Antenna
Installation:



5. 将GPS天线安装到户外，并确保固定好的GPS天线接受信号一面面对着天空，如Fig.1；如果GPS天线安装如Fig.2，GPS信号的接收将会受到影响；如果GPS天线安装如Fig.3，则GPS信号将受到非常大的影响，信号较弱时可能完全接收不到信号。

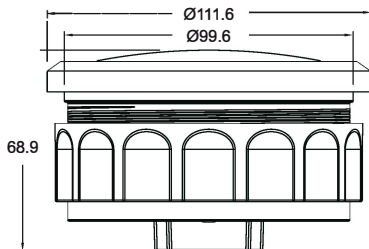
Install the GPS antenna outdoors and ensure that GPS antenna receiving signals faces the sky, as shown in Fig.1; If the GPS antenna is installed as shown in Fig.2, the reception of GPS signal will be impacted; If the GPS antenna is installed as shown in Fig.3, it will have a big impact on the GPS signal, and the signal even not be received when the signal is weak.

6. 通电之后，仪表需要1分钟左右的时间去接收卫星信。信号强的时候一般40秒以内即可完成定位（初次定位可能需要1~2分钟的时间）。当船移动时，指针显示相对地的即时速度（SOG）。在船停靠期间，所有的数据将不会变化，所以指针不能作为参考使用，要直到船开始移动，仪表上显示的数据才会准确。

It takes about one minute for the instrument to receive the satellite signal when powers 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 during the period the boat stops, so the pointer cannot be used for reference. But all the data will turn into accurate once the boat moves.

外形尺寸/Appearance Parameter

1. 显示区域/Dimension : 3.0 inch
2. 分辨率/Resolution : 432*432 pixels
3. 安装孔径/Mounting Dimension : $\phi 100.5$ mm
4. 外观尺寸/Appearance Dimension : $\phi 111.6$ mm

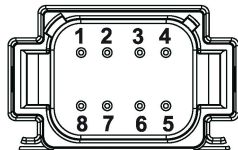


四、电气参数/Electronic Parameter

1. 工作电压/Working voltage : 9 – 32 VDC
2. 工作电流/Working current : ≤ 170 mA (12V)
3. 工作温度/Working temp. : $-30 \sim +85$ $^{\circ}\text{C}$ ($-22^{\circ}\text{F} \sim +185^{\circ}\text{F}$)
4. 存储温度/Storage temp. : $-30 \sim +85$ $^{\circ}\text{C}$ ($-22^{\circ}\text{F} \sim +185^{\circ}\text{F}$)

五、引脚定义/PINS Definition

1. 4芯线红色/4 cores cable red wire-RPM
2. 4芯线蓝色/4 cores cable blue wire- Fuel Level
3. 4芯线黄色/4 cores cable yellow wire-Water Temp.
4. 4芯线黑色/4 cores cable black wire-Oil Pressure
5. 2芯线红色/2 cores cable red wire-电源正/Battery(+)
6. 2芯线黑色/2 cores cable black wire-电源负/Battery(-)
7. CAN-H
8. CAN-L



六、如何使用KMG-30/KMG-30 Usage

1. "MODE" 按键：确定
2. ▲ 按键：光标向上移动/加
3. ▼ 按键：光标向下移动/减
4. 设置数值页面，长按 ▲ 按键：加10
5. 设置数值页面，长按 ▼ 按键：减10
6. 在主页点击按键"MODE"进入设置页面。
7. 当处于锁定状态时，需要输入正确密码，才能进入设置页面。默认初始密码为1234。
8. 在输入密码页面，"MODE"按键为移动光标到下一位密码，"上""下"按键为增减当前光标的数值。

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 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.

七、修改系统设置/Modify system Settings

1. 修改显示风格/Modify Display Style : Setting → Display Setting → Style Setting
2. 修改转速范围/Modify RPM Range : Setting → Display Setting → RPM Setting
3. 修改锁定密码/Modify Locking Password: Setting → Lock Setting → Reset Password
4. 修改锁定时间/Modify Locking Time: Setting → Lock Setting → Lock Time
5. 修改GPS速度单位/Modify GPS Speed Units :
Setting → Display Setting → GPS Setting → Unit Setting
6. 修改GPS信号来源/Modify the GPS Signal Source :
Setting → Display Setting → GPS Setting → Signal Setting
7. 修改油位、水温、油压报警值/Modify Fuel Level, Water Temp., Oil Pressure Alarm Value :
Setting → Alarm Setting
8. 修改信号输入/Modify Signal Input : Setting → Input Select
9. 修改信号设置/Modify Signal Settings : Setting → Input Setting

八、设置菜单框图/Menu Diagram Setting

Setting	Display Setting	Style Setting		Style 1/Style 2		
		RPM Setting		4K/6K/8K		
		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				
		ANALOG				
	Input Setting	Instance	Engine Instance		0-15	
			Fuel Instance		0-15	
		Fuel Level		0-190 ohm		
				240-33 ohm		
				Customized		
		Water Temp.		301-23 ohm		
				Customized		
		Oil Pressure		10-185 ohm		
				Customized		
		Ratio Setting		0.5-250		

九、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



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