KMG-42T Instruction Manual

KMG-42T 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, Voltage and hour meter, and it supports NMEA 2000 signal、J1939 signal and analog signal input.

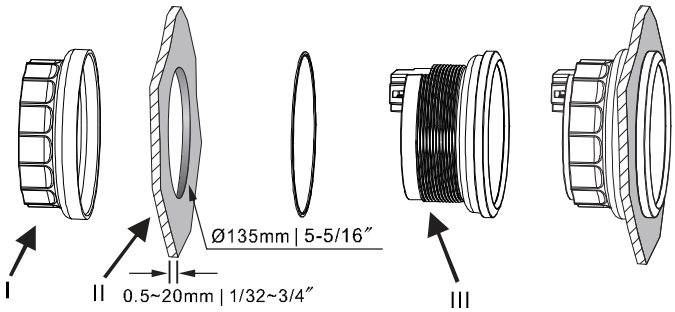
CONTENTS

Ⅰ、Gauge and Accessories in Package

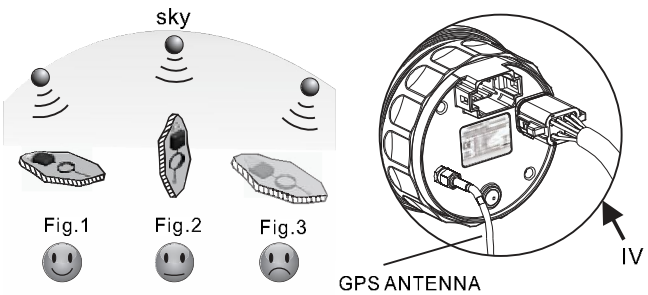
KMG-42T instrument, CAN-BUS cable, Analog signal cable, GPS antenna and Instruction manual.

Ⅱ、Installation Steps

1. Drill an 135mm (5-5/16") hole on the panel (II) and make sure a clearance of 80mm (3 1/4") on the backside of the panel for KMG-42T gauge.
2. Remove fastening ring (I), insert KMG-42T 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 NMEA 2000 network. If chose analog signal input, it needs to connect pin of analog signal input with sensor.



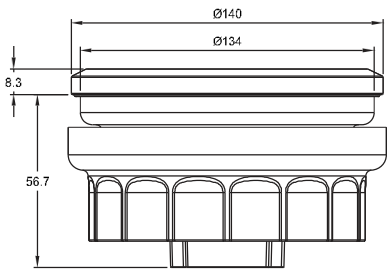
GPS Antenna Installation:



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 big impact on the GPS signal, and the signal even not be received when the signal is weak.
6. 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.

Ⅲ、Appearance Parameter

1. Dimension : 4.2 inch
2. Resolution : 720*720 pixels
3. Mounting Dimension : φ135 mm
4. Appearance Dimension : φ140 mm

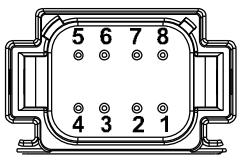


Ⅳ、Electronic Parameter

1. Working voltage : 9 – 32 VDC
2. Working current : ≤330mA (12V)
3. Working temp. : -30~+85℃(-22℉~+185℉)
4. Storage temp. : -30~+85℃(-22℉~+185℉)

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-42T Usage

1、All operations of KMG-42T are completed by touch screen.
2、Click " ⚙ " at the bottom of the screen on the home page then enter the Settings page.
3、When locked, you need to enter the correct password then will move to the Settings page. The password length is four digits and the default initial password is 0000.
4、Locking function is optional. See section 7 for details.
5、When the signal is J1939, if DM1fault occurs, the ⚠ red flashing alarming icon will appear in thelower left corner of the interface of style 1and2.

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.

VII、Modify system Settings

1. Modify Display System :	Setting-Display Setting-Style Setting
2. Modify Unit Setting :	Setting-Display Setting-Unit Setting
3. Modify Brightnesss Setting :	Setting-Display Setting-Brightness
4. Modify GPS Setting :	Setting-Display Setting-GPS Setting
5. Modify Color Setting :	Setting-Display Setting-Color Setting
6. Modify Language Setting :	Setting-Display Setting-Language
7. Modify Fuel Level,Water Temp., Oil Pressure,Voltmeter Alarm Value :	Setting-Alarm Setting
8. Modify Siganl Input Select :	Setting-Input Select
9. Modify Signal Input Setting	Setting-Input Setting
10. Modify Locking Password :	Setting-Lock Setting-Reset Password
11. Modify Locking Time :	Setting-Lock Setting-Lock Time
12. Modify Locking state:	Setting-Lock Seting-Lock ON/OFF
13. Modify Night state:	Setting-Night ON/OFF

VIII、Menu Diagram Setting

Display Setting	Style Setting	style_1/style_2	
	Unit Setting	Speed Unit	Knots/(Km/h)/MPH
		Temp. Unit	Celsius/Fahrenheit
		Pressure Unit	Bar/PSI
	Brightness	10%-100%	
	GPS Setting	GPS Antenna /NMEA2K Network	
	Color Setting	Black/White	
	Language	English/中文	
Alarm Setting	Fuel Level	0-100%	
	Water Temp.	40-120°C/100-250°F	
	Oil Pressure	0-10bar/0-145psi	
	Voltmeter	8.0-16.0V	
Input Select	NMEA2000		
	J1939		
	ANALOG		
Input Setting	Engine		
	Fuel Level	0-15	
	DTC(DM1)		
	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
Lock Setting	Reset Password		
	Lock Time		
	Lock OFF/ON		
Night ON/OFF			

IX、NMEA 2000 & J1939 Parameter Group Number (PGN)

NMEA 2000

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
127508	Battery Status	136	Battery Voltage

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
65271	Vehicle Electrical Power 1	158	Keyswitch Battery Potential

* when the gauge is not in use, please put on the matched cover to protect the gauge.

RoHS Compliant CE NMEA 2000 SAE J1939 IP67