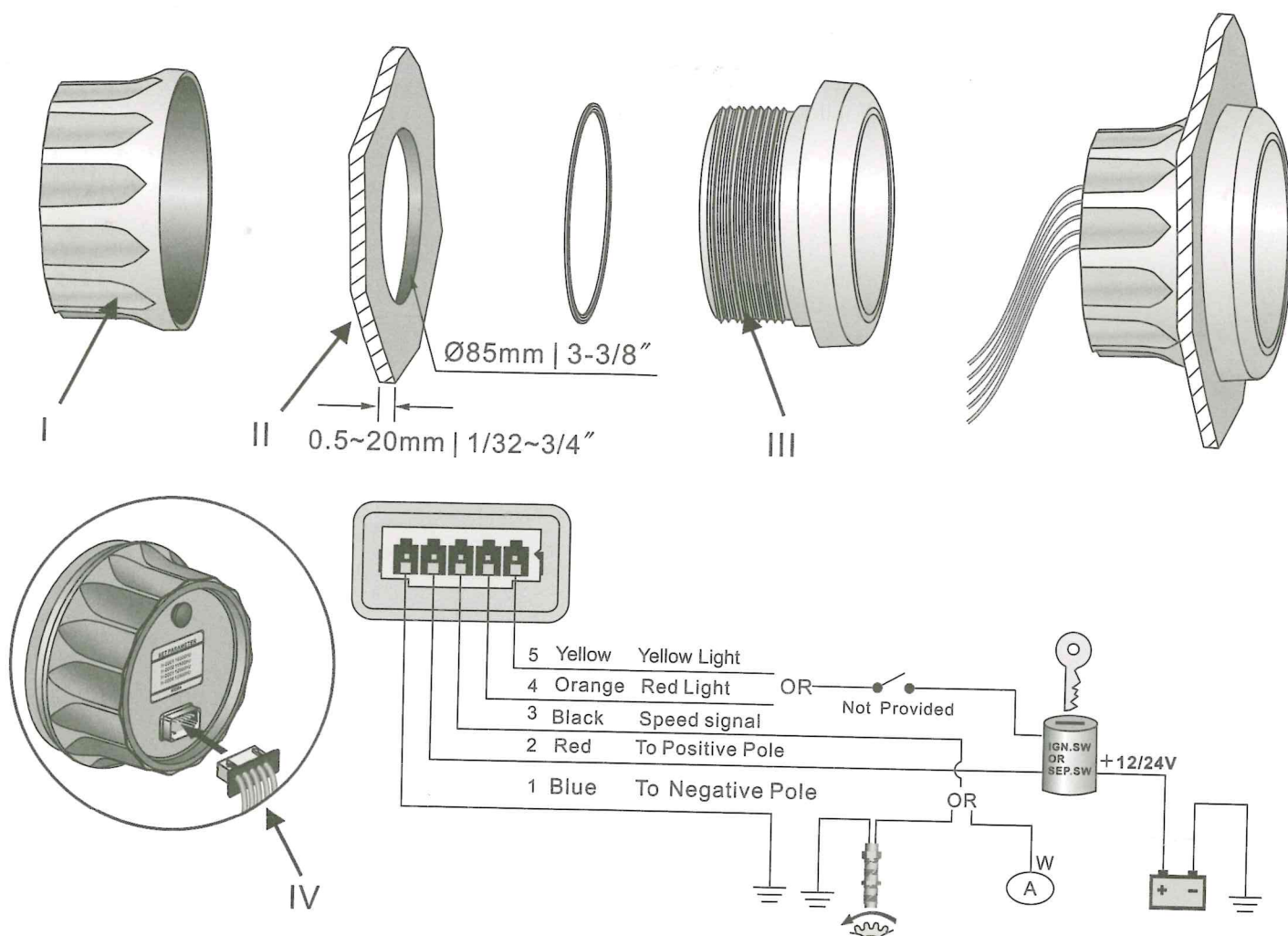




INSTALLATION INSTRUCTIONS



INSTALLATION STEPS

1. Cut a 85 mm(3 3/8") diameter panel hole(II). You will need a minimum clearance of 55mm(2 3/16") behind the panel to fit the gauge.
2. Take off the fastening ring(I), place the gauge into the panel hole, adjust its position and then fasten the rear cover.
3. According to wiring instruction to do wire connection. Gauge can be connected to 12VDC and 24VDC power directly.
4. Select either red or yellow back light by your fondness.
5. Insert the wire connector into the gauge (IV), adjust its speed ratio to get a suitable value after power on, according to the rotate speed of your equipment.

Instruction for speed ratio adjustment:

- a. Keep on pressing the rubber button of the backside for 3 seconds, and then enter into setting mode. If leave button more than 3 seconds, it will be out of setting mode.
- b. The value will increase when you press the button; When you leave the button and then press it again, the value will decrease. The longer you press the button, the quicker the value will count up. The minimum step value is 0.5 and the adjustable range is 0.5-250.
- c. When you get the required speed ratio value after adjustment, please leave the button. The tachometers will auto-save your setup after 3 seconds. If the setup doesn't meet your demand, please re-setup.
- d. The speed ratio means the number of output pulse of engine per rotation, some common setups are listed in the table below, together with how a speed ratio of 25 will look during gauge setup.

The common setup on boat engine:

Outboard		Inboard & Gas engine		
Poles	Speed ratio	Cylinder	Cycle	Speed ratio
4	2.0	4	4	2.0
6	3.0	6	4	3.0
8	4.0	8	4	4.0
10	5.0	10	4	5.0
12	6.0			

Speed ratio setting :

H-025.0 H

If your engine doesn't meet rules on the table, please adjust speed ratio value according to actual rotate speed of engine.

- Notice:
1. The gauge should be charged with power source before setting speed ratio.
 2. In some place where there is heavy tacho signal disturbance, the pointer of the tachometer may not move along with the changing of the rotate speed. Please add a resistor between 1/4~1W, 1~20K in series connection to strengthen the signal processing capability. We suggest adding a 20K potentiometer in series connection to test.