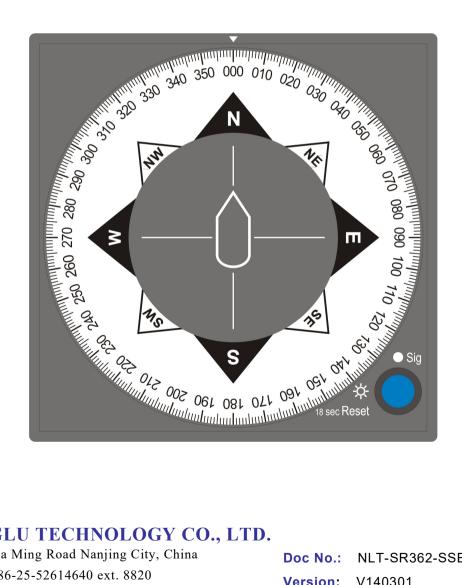
# NINGLU SR362

# **Steering Repeater Operating & Installation Manual**



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# INSTRUCTION

Steering repeater SR362 ensures a clear indication of the heading information by using a 360° compass card. Brightness is adjusted on the front panel, via NMEA or from the optional remote controller, DIM930. Multiple installation methods facilitate observation in different positions.

#### **Features**

- NMEA0183 gyro signal input
- 1°reading accuracy
- Signals monitor indication
- 6-level adjustable LED backlight
- Self-calibration when boot

# **Packing list**

No.	Item	Qty	Note	
1	Main unit	1	SR362	
2	Operation manual	1		
3	Self-tapping screws	4	ST4.2×25 for flush mounting	
4	Self-tapping screws	3	Black ST4.2×20 for ceiling mounting	
5	Power/data cable	1	2m with 8-pin connector	
6	Remote dimmer	1	DIM930 (optional)	

#### **SPECIFICATIONS**

Dimension:  $218 \text{ (L)} \times 202 \text{ (W)} \times 64 \text{ (H)} \text{ mm}$ 

Flush mounting window size: 170×170mm (6.693×6.693 inch)

Weight: about 2Kg

Supply voltage: DC18 $\sim$ 36V reverse-polarity and over-current protection

Power consumption:  $\leq 8.4W(DC 24V)$ 

Indication range:  $0 \sim 359^{\circ}$ 

Reading accuracy: ±1°

Data format: NMEA0183 sentence

\$--HDT,x.x,T\*hh<CR><LF>

Heading, degrees true

Input baud-rate: 4800bps

In accordance with: IEC61162-1

# Permissible ambient temperature and humidity

Operation temperature:  $0^{\circ}$ C  $\sim$  +40 $^{\circ}$ C

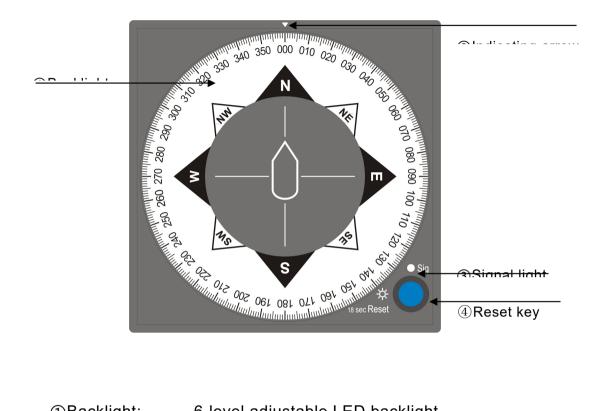
Storage temperature:  $-20^{\circ}$ C  $\sim$  +70 $^{\circ}$ C

Humidity: 10%  $\sim$  90% relative

Type of enclosure acc. to: IP 22

# **OPERATION**

#### **Panel introduction**



①Backlight: 6-level adjustable LED backlight

②Indicating arrow Indication of the heading

③Signal light: Indication of working status

1. Normal mode: Signal monitor

Signal correct: green (continuous)

Signal incorrect: red (flash)

2. Manual calibration mode: red/ green (flash)

(Refer to Manual calibration in page 4 for details)

4 Reset key: 1. Adjust backlight

2. Manual calibration

#### **OPERATION**

#### 1. Boot-strap (self-calibration)

Connected with MEA0183 gyro signal and power supply, SR362 will auto start self-calibration to 0° while signal light is red (continuous).

ATTENTION! Please avoid direct sunshine during self-calibration!
Otherwise it may cause calibration failure.

#### 2. Common mode

When self-calibration, unit auto identify the NMEA0183 signal and turn into common mode. Signal light indicates the signal status:

Input correct NMEA0183 gyro signal: **Green (continuous)** 

Input incorrect NMEA0183 gyro signal: Red (flash)

In common mode, users can adjust backlight by pressing Reset key (quick touch).

#### 3. Manual calibration mode

If self-calibration fails, please restart the unit or turn into manual calibration mode.

#### 3.1 Turn into manual calibration mode

Long touch Reset key for 18 seconds (25 times buzzers) until the signal light turns to **red** (**flash**) and compass card starts to rotate, and let go the Reset key.

#### 3.2 Manual calibration

Wait until the compass stop rotation, then long touch Reset key.

The compass card will rotate counterclockwise slowly until you let go Reset key, meanwhile signal light is **red (flash)**.

Long touch Reset key again, then signal light will turn to **green (flash)**, and the compass card will rotate clockwise slowly until you let go the Reset key. Repeat the above operation until calibrate to 0°.

#### 3.3 Turn into common mode

After calibrating to 0°, stop all operation, then the signal light will flash quicker and quicker until be **green (continuous)** which means common mode

# **REMOTE DIMMER** (optional)

DIM930 can is used for remote control of the SR362 backlight.



### **WIRING**

Supply voltage: DC24 (DC18V~DC36V)

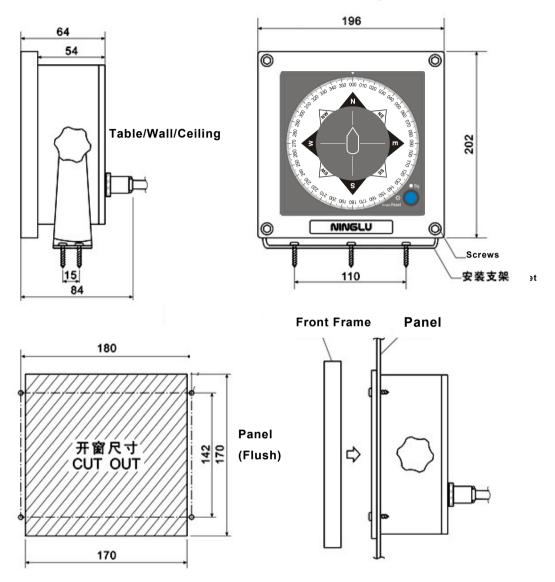
WIRING CONNECTING(接线说明)					
COLOUR(颜色)	SIGNAL (信号)	COLOUR (颜色) SIGNAL (信号)			
1 RED (红) 2 BLACK (黑) 3 BLUE (蓝) 4 WHITE (白) 5 ORANGE (橙) 6 GREEN (绿)	- 24V NMEA IN B	7 YELLOW(黄) 8 GREY(灰) 9 SHIELD(屏蔽) DIM+ DIM- DIMKEY	DIM - DIMKEY GND REMOTE DIMMER (遥控亮度)		





# INSTALLATION

The unit can be mounted in panel, table, wall or ceiling.



- 1. For tabletop mounting, wall or ceiling mounting use the supplied bracket.
- 2. For panel (flush) mounting, take off the bracket and take off the front frame.

Cut a 170x170mm(6.693×6.693inch) size square window in the panel, fix the inside 4 holes with tapping screws, and put on the front frame again.