KCR-160 Digital Compass Repeater

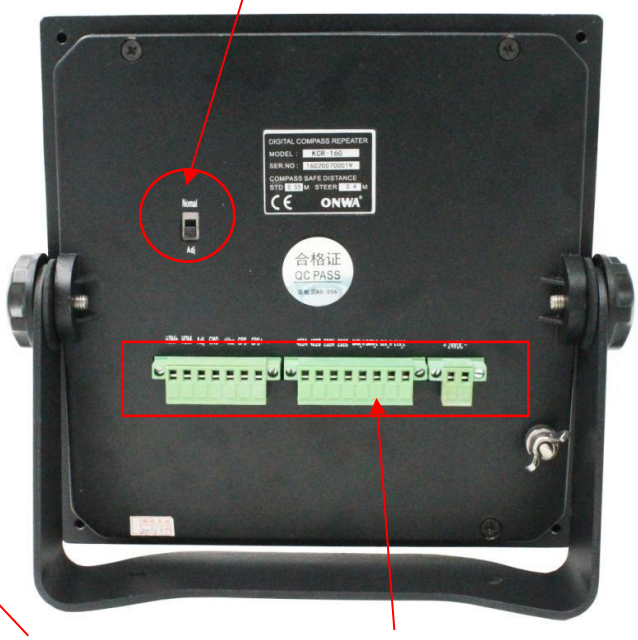
1. Introduction :

KCR-160 digital compass repeater can automatically identify two NMEA0183 heading data input, HDT and HDM with baudrate of 4800. KCR-160 has a 4-Digit LED display and a rotating LED on the outer circle of the compass scale.

KCR-160 can also re-output the input NMEA0183 heading data to the output ports in the format of NMEA0183 and AD-10.

2. Descriptions

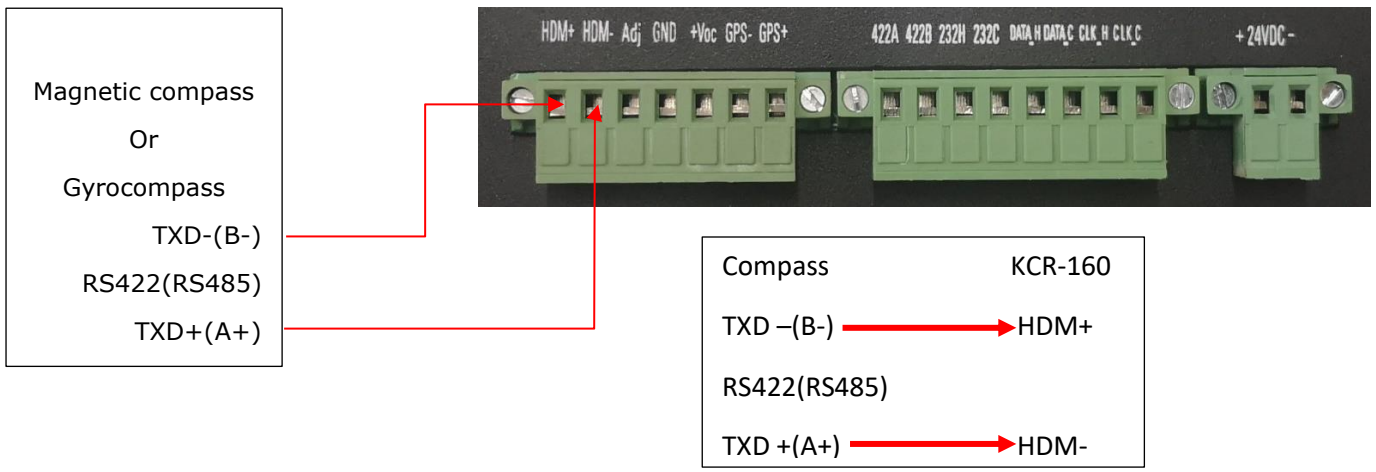
Front panel



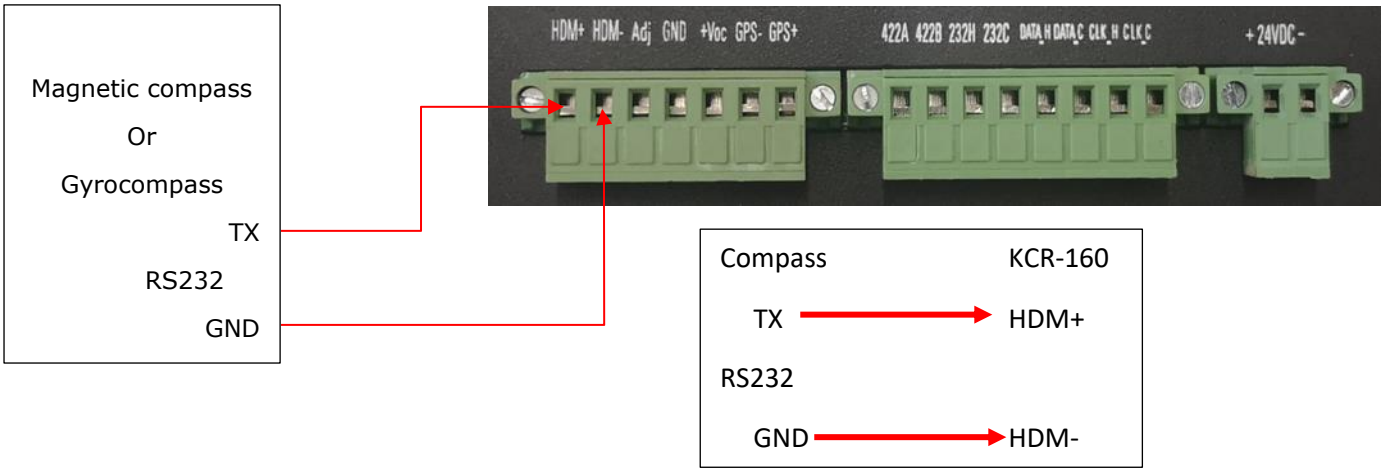
Rear panel

3. Installation Guide

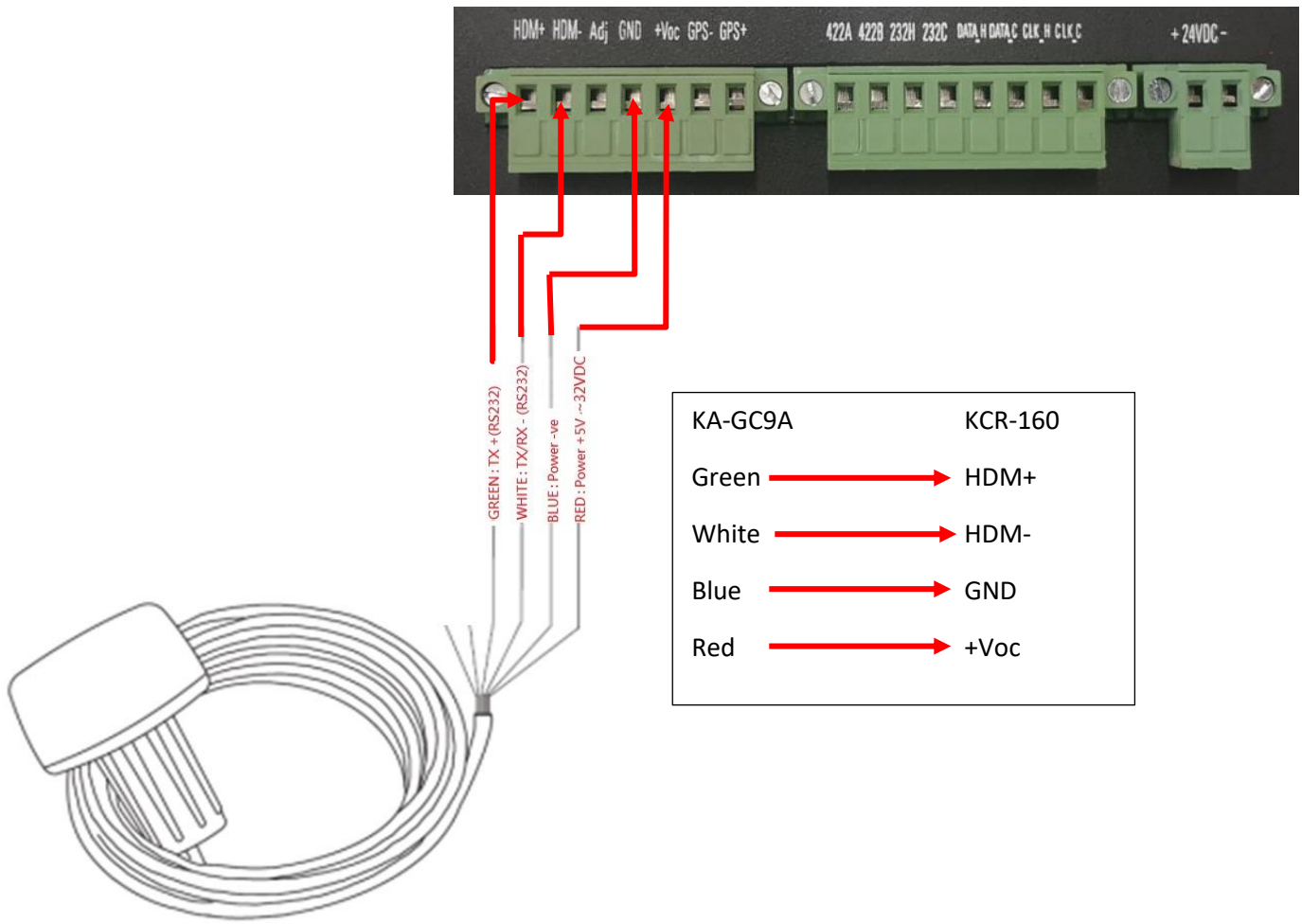
3.1 NMEA0183 heading input RS422/485 connection



3.2 NMEA0183 heading input RS232 connection

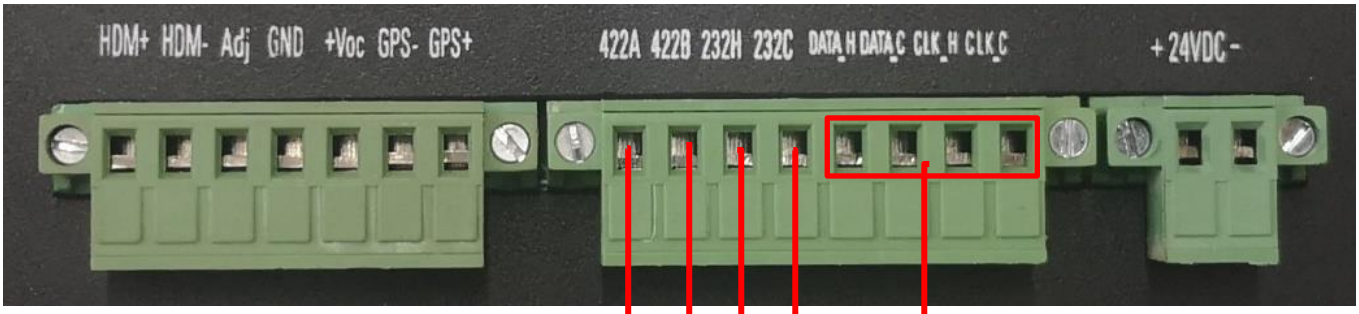


3.3 ONWA KA-GC9A connection



3.5 Output connections

The heading input is re-outputted to the output ports below. You can connect it to radar, chartplotter or other navigational equipment to provide heading signal.



Navigation equipment with RS422(RS485) interface

RXD-(B-)

RS422(RS485)

RXD+(A+)

Navigation equipment with AD-10 interface

AD-10

Navigation equipment with RS232 interface

RX

RS232

GND

3.6 Power connection

+

9V-36VDC

-

Power supply or battery

4. Operation

4.1 Press the red switch on the front panel to switch ON the unit.

Once powered ON, the 4-digit LCD Display on the front panel lights up.

If heading signal is detected the 4-digit LED Display will show the heading:

In case no heading signal is detected the 4-digit LED Display will not show any digit:

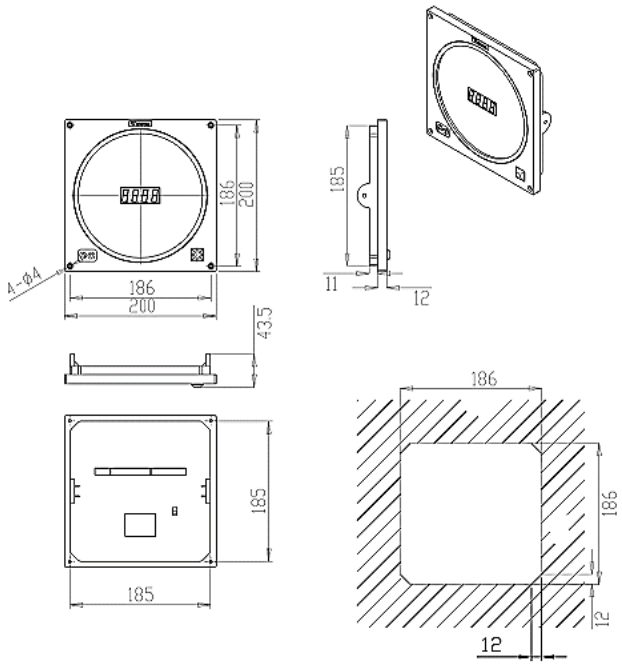
4.2 LED brightness adjustment

You can press the UP/DOWN arrows to adjust suitable LED brightness for day/night environment.

5. Specifications

Dimension: 200*200*27mm	Weight: 1.2kg
Compass safe distance: 1m	Waterproof: IP66
Working temperature: -20℃ to +70℃	Humidity: lower than 95%
Scale accuracy: 1.5°	digital display accuracy: ± 0.2°
Track rate: 45°/s	Power supply: 9V – 36VDC, 0.20A at 24VDC
Input data: RS-422, RS-485 or RS-232	Output data: RS-422, RS-485, RS-232
Input data format: NMEA 0183(HDT or HDM), baudrate: 4800,no priority,1 stop bit	
Output data format: AD-10 and NMEA 0183(HDT), baudrate: 4800,no priority,1 stop bit	

6. Dimensions



Panel mounting

Desktop mounting