Wind Repeater

IR761

Operation & Installation Manual

NINGLU

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Introduction

The IR761 wind repeater is a combined display for wind speed and direction.
It receives NMEA0183 signal from a marine anemometer (talker), display the average, max/min wind speed on digit LEDs, and wind direction on a double LED circle. It's 144x144 Din size cabinet is suitable for panel (flush) mounting.
Also the tabletop and wall mounting is available with the bracket.

Wind direction is indicated within a double LED circle, with a ship figure.
Red ring of 36 LEDs show relative wind direction, orange ring of 36 LEDs show wind direction variation.

Inside this circle a three digit numeric display indicates the wind speed.
The first line 3 digital LEDs show relative wind speed.
The second line 3 digital LEDs show max relative wind speed in interval time.

Press the ▲▼ keys only, to have LED dimming control.
Press the S key only, to select the wind speed unit: m/s, knots, km/h, mph.
Press the F key , to select the wind speed average interval 1,2,5,10 minutes.

Specification

Relative wind direction: Outer circle with 36 red LED's
Wind direction variation: Inner circle with 36 orange LED's
Wind speed display: One 3 digits red LED displays size 14.3 mm height
Max/min speed display: One 3 digits red LED display size 10 mm height
Data input: RS422, NMEA0183
NMEA0183 format: $IIMWV,123,R,5.8,N,A*24 Wind speed in knots
$IIMWV,123,R,5.8,M,A*27 Wind speed in m/s
Wind input baud rate: Receives baud rates of 300, 1200, 2400, 4800 and 9600, automatically.
Output baud rate: Same as host UNIT

Error alarm:

Form	explain
ERR	Shows "ERR" when the operator unit receives no signal or the signal is not a NMEA message.
_ _ _	Shows "_ _ _" when the message is incorrect
. . .	Shows "…." when receiving other message

Measurement: L144mm W144mm H62mm
Flush mounting window: L125mm W125mm
Weight: 1.4kg
Power & Voltage: 24V DC (20-32V)
Consumption: 2W (24V)

Environmental (according to IEC60945 for exposed equipment)

Work temperature: -15°C - +55°C
Storage temperature: -20°C - +70°C
Humidity: 10%-90% relative humidity
Protection: IP 56
Compass safe distance: 85 cm
Note:
Operating in range 0-40°C is recommended and will increase overall lifetime of the product.

Junction & Operation

Power warning!

The voltage can not exceed 36V. Over voltage damage is out of our warranty.

RED 24V +
BLACK 24V -

Junction:

COLOR	SIGNAL	COLOR	SIGNAL
		5 ORANGE	
1 RED	NMEA IN B		
2 BLACK	NMEA IN A	DIM +	
3 BLUE	NMEA OUT A	6 GREEN	DIM -
4 WHITE	NMEA OUT B	7 YELLOW	DIMKEY
		8 SHIELD	GND

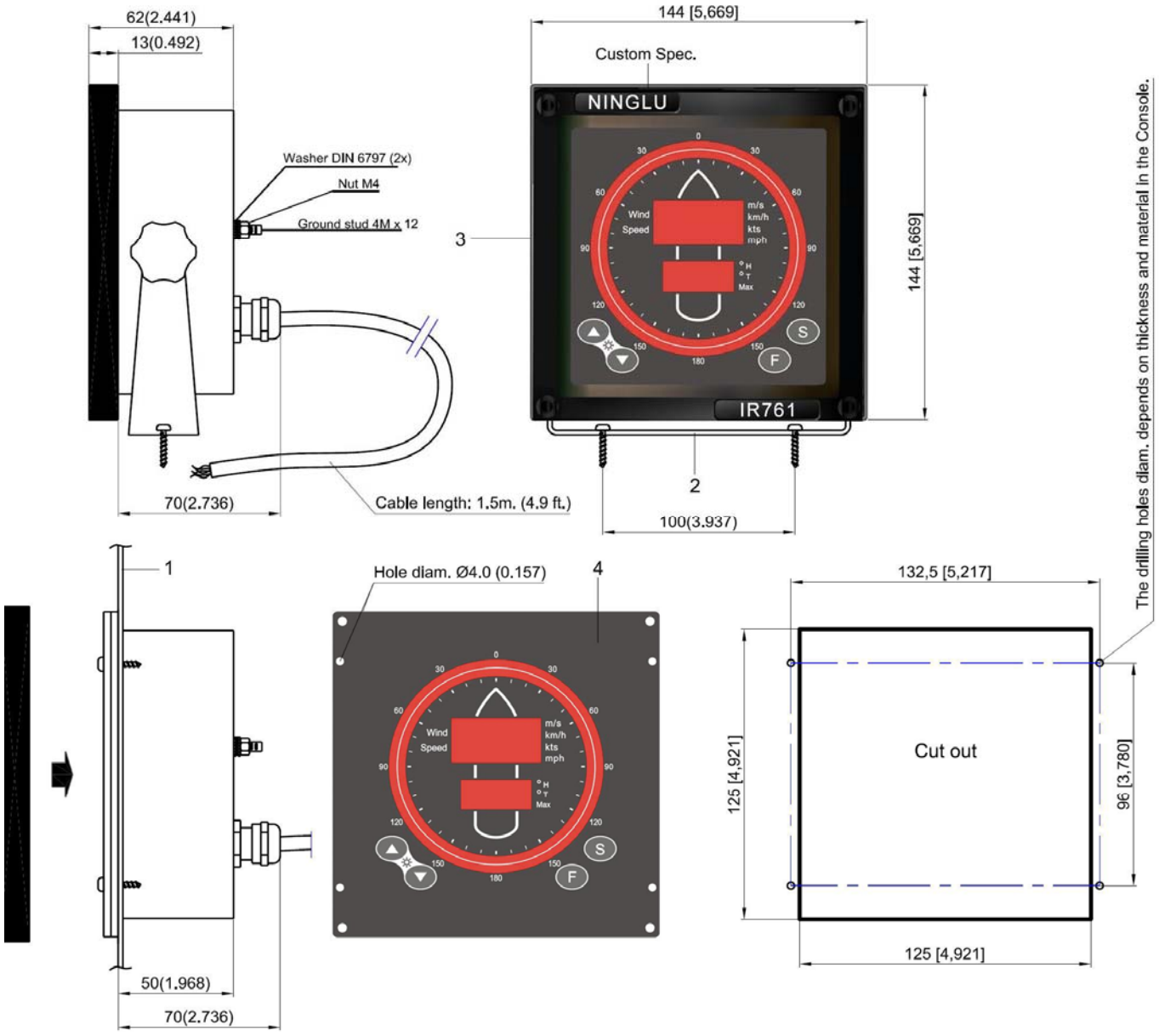
Operation:

Turn on/off Press any key to turn on.
Press ▲ ▼ at the same time to turn off.
Set backlight Press ▲ or ▼ to set backlight for display
Select wind speed unit
Press [S] to select the wind speed unit:（m/s, knots, km/h, mph）.
Interval time value Press [F] again and ▲ or▼ to select the interval time value: 1/2/5/10 min

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 125x125mm Din size square window in the panel, fix the inside 4 holes with tapping screws, and put on the front frame again.



Console mounting order:

A. Make a cut out in the Console (1) 125 x 125 (4.921 x 4.921)

B. Remove the mountingbracket (2)

C. Unscrew the 4 screws in the frame (3) (one in each corner) and remove the frame.

D. Put the Monitor(4) in the cut out and mark the 4 centerpoints for the Drill in the Console(1)
(The drilling holes diam. depends on thickness and material in the Console.)

E. Use Panh. screws DIN 7981 Diam. 2.9 (0.114). Length depends on the Console thickness.

F. Finally put on the frame (3). Make sure that the screwheads correspond with the cut outs in the frame.