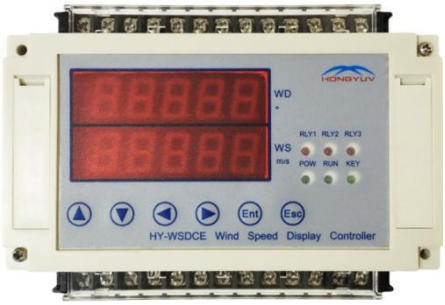
HY-WSDCE Wind Speed Direction Controller

User Manual



Introduction

HY-WSDCE Wind Speed Direction Controller is plug and play and compatible to our ultrasonic anemometer.

There are three alarm values can be set and correspond to three relay output which can be wired as NO or NC to trigger alarm signal or control other slave device.(each relay has corresponding indication light)

Function

- 3 ways relay alarm output
- 2 ways 4-20mA current loop output(B for wind direction, A for wind speed)
- 6 keys(press one second is short press, press longer than 2 seconds is long press)
- 2 rows LED display(upper row is wind direction, lower row is wind speed)
- RS485 or RS232 output(MODBUS-RTU prototol)
- Six LEDs indication lights(three for relays,the other three for POWER,RUN,KEY)

Technical parameters

Display	4 digit 7 Seg LED
Communication interface	RS485
Power supply	AC220V
Analog output	2 ways 4-20mA output
Digital output	MODBUS-RTU via RS485
Relay output	3 ways relay outputs Capacity:125 V AC; max. 60 VA; 150 V DC; max 30 VA
Dimension	60mm*154mm*110mm (H*L*W)
Weight	About 540g
Operating temperature	-30— 65 ℃
Operating humidity	0—95%RH
Lightning surge capacity	4KV

Operation Procedure

Long press “Ent” to enter setting mode:(instrument will automatically exit setting mode without any operation for over 8 seconds.)

Short press “Ent” to change value, corresponding digit will keep flashing(press ◄► key to select digit you need, and press ▲ to increase or ▼ to decrease value)

P01: alarm value 1 for relay 1 is 6.3 m/s

P02: alarm value 2 for relay 2.

in below setting, alarm value 2 is 8.1 m/s

P03: alarm value 3 for relay 3.

in below setting, alarm value 3 is 50.1 m/s

P04: Delay before turn on relay(unit: seconds)

in below setting, relay will turn on if wind speed keep exceeding alarm value for 3 seconds

P05: Delay before turn off relay(unit: seconds):

in below setting, relay will turn off if wind speed keep exceeding alarm value for 3 seconds

P06: LED brightness(Level 0~7, lowest~highest)

P07: Alarm function code(0:off; 1:on)

P08: 4-20mA current output function code(0:off; 1:on)

Notice:Long press “Ent” to save setting or short press “Esc” to cancel setting, long press “Esc” to exit setting mode.

Definition of cable socket

Upper row	RLY1 NC	RLY1 COM	RLY1 NO	RLY2 NC	RLY2 COM	RLY2 NO	RLY3 NC	RLY3 COM	RLY3 NO	N/A	N/A	RS485 Input DB	RS485 Input DA
Lower row	220VAC Live	220VAC Neutral	AC Earth	N/A	12VDC GND	12VDC Power +	5VDC Power +	4-20 mA Out A	4-20 mA Out B	Signal output YA	Signal output ZB/TXD	Signal output RXD	Signal output DB

Communication interface:

While RS485 output: use YA(+),ZB(-)

While RS232 output: use ZB/TXD(send),RXD(receive), 12V GND