MODEL：QH-VISG2-ED(With battery) / QH-VISG2-EN(No battery)

Voltage And Current Signal Generator-User manual V202008

1   Technical Indicators

1.1   three power supply modes ,using the mobile phone charger or external 24V can charge/work;

  1.1.1   External wiring terminal power supply DC15-30V 1W(without charging)/4W(charging);

  1.1.2   External MicroUSB-5V current 0.2a (no charge)/0.8A(charge);

  1.1.3   (Optional) The built-in 3.7V lithium battery(1000mah), the maximum charging current is 0.6A, Generally, it takes more than 4 hours to fully charge. It can be used for 1-5 hours;

1.2   The voltage output is adjustable ± 10V, Error <0.05V after calibration, and the driving current <20mA

1.3   The current output is adjustable 0-22ma,Error <0.05mA after calibration, and the sampling resistance is <500Ω;

1.4   working environment: 0-40 ℃, relative humidity < 80%；

1.5   Size (cm)：Shell =100x60x20 ,The plug protruding 9cm,The knob protruding 15cm

2   Wiring diagram

1	GND	Power supply negative (input)
2	24V	Power supply positive (input)
3	AI+	Current passive mode 24V+ input
4	AIO	Current signal output
5	AVO	Voltage signal output
6	GND	Signal ground (connect 1-GND)
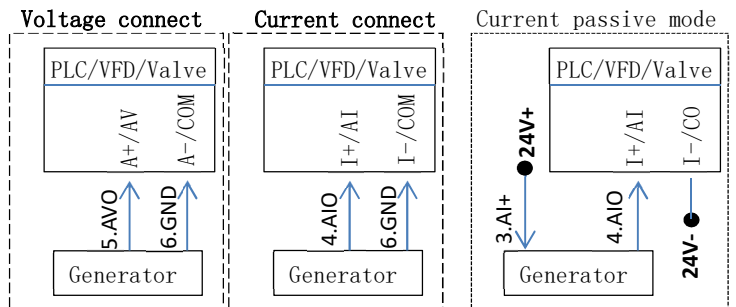
2.1   Voltage signal output：5-AVO   6-GND

2.2   Common active mode of current output：Our output 4-AIO 6-GND corresponds to PLC I + I -!

2.3   Current passive mode：The PIN 3-AI+ is externally connected to 24V+, and then output from 4-AIO to control the external 24V current.Our meter is equivalent to an adjustable resistance;Therefore, it is called passive mode.

3   Usage：

3.1   Operation panel and operation instructions

3.2   Switching - Adjust the display V or I, press the "MODE" key to switch and adjust the display V or I MODE

  The indicator light shows what state it is in and what mode the system operation is in;

  The original output will continue to output After switching, but not in the adjustment status;

  Turn on the battery switch to check the battery status and quantity

  3.2.1   Battery status indicator：

Battery indicator	Green	Yellow	Red	Twinkle	Green not Twinkle (External power)
capacity	≥80%	≥40%	＞0	Charging。。。	Full

3.2.2 Hold the "MODE" key for 1 second and the digital tube flashes for 5 seconds to display the battery voltage;

3.3   Digital adjustment and parameter setting：

（**Forewarned**：Push Down The Knob Is "OK<Confirm>",Clockwise Rotation The Knob One Pulse Is" + <Add>", Anticlockwise Rotation The Knob One Pulse Is" - <Minus>"）

3.3.1 Short Press "OK" To Save The Output Value,Digital Tube Display "..." After loosening, Saved Successfully, The Output Value Is This Saved Value After The Next Boot; When We Debug The Device, We Need To Adjust The Output Value Randomly, As Long As The Knob Is Not Pressed, It Will Still Be The Saved Value After Rebooting;

3.3.2 Hold The "OK" For 2 Seconds To Enter The Setting State.,Display"F001"(Parameter Number 001);

3.3.3 Turn the knob to change the parameter number, You need to enter a password when enter F002 or F100：

   3.3.3.1 F001->F002 enter a password "**+ - - +**（Turn the knob）" ,Then press the knob to enter;

   3.3.3.2 F001->F100 enter a password "**+ - + -**（Turn the knob）" ,Then press the knob to enter;

3.3.4 Press "Ok" to enter the setting of corresponding parameter value, and turn the knob to modify parameters：

3.3.5 Press "Ok" to save the parameter, exit the parameter setting, and display the next parameter number (after setting the F001 value without entering the password, the normal operation screen will enter);

3.3.6 Rotate the knob directly to the last parameter number, press the "OK" key, and the setting is completed;

3.3.7 If no operation on the parameter setting screen exceeds 10s, it will exit the setting state;

3.4   Voltage setting parameters. please read section 3.4 before operating, especially to enter a password：

Number	Description	Note	Default
F001	Adjust Mode	0:Coarse 1:Fine 2: Point Mode(Need to set F100>0)	0
F002	Output Mode	0:±10V 1:±5V 2:0-10V 3:2-10V 4:0-5V 5:1-5V 6:0-3.3V 7:0-2.5V 8:0-1V 9:-10V-0V	2
F003	Display Mode	0:Real Voltage 1:Percentage 0-100.0% 2:50HZ 3:1500	0
F004	Add Or Sub Num For Knob's Pulse(Coarse)	1-50 No Decimal Point Concept (1-50)×10	1
F005	Add Or Sub Num For Knob's Pulse (Fine)	1-50 No Decimal Point Concept (1-50)×1	1
F006	-10V Calibration Value	-199 -- +199 Internal Reference,Please Be Careful	
F007	0V Calibration Value	-199 -- +199 Internal Reference,Please Be Careful	
F008	+10V Calibration Value	-199 -- +199 Internal Reference,Please Be Careful	
F100	Point Mode Num	0: Point Mode Not Use 2-9: Point Num	**0**
F101...F109	Point Output Value	range : -10V to 10V You can set as many values as there are points	

3.5   Current setting parameters. please read section 3.4 before operating, especially to enter a password：

Number	Description	Note	Default
F001	Adjust Mode	0:Coarse 1:Fine 2: Point Mode(Need to set F100>0)	0
F002	Output Mode	0:0-20mA 1:4-20mA 2:0-22mA	0
F003	Display Mode	0:Real Voltage 1:Percentage 0-100.0% 2:50HZ	0
F004	Add Or Sub Num For Knob's Pulse(Coarse)	1-50 No Decimal Point Concept (1-50)×10	1
F005	Add Or Sub Num For Knob's Pulse (Fine)	1-50 No Decimal Point Concept (1-50)×1	1
F008	Calibration Value	-999 -- +999 Internal Reference,Please Be Careful	
F100	Point Mode Num	0: Point Mode Not Use 2-9: Point Num	**0**
F101...F109	Point Output Value	range : 0-22mA You can set as many values as there are points	

4   current problem detection: the possibility of the current not output is very small,you can measured the voltage   of 4-AIO   6-GND with a multimeter, if it is >20V, than current file of your multimeter is broken or gear is wrong, because there are voltage must be current, try change a multimeter, multimeter current file inside a fuse is easy to burn;

5   Please Read This Manual Carefully Before Wiring, Turn Off The Power And Then Connect;