0-10V Voltage Signal Generator
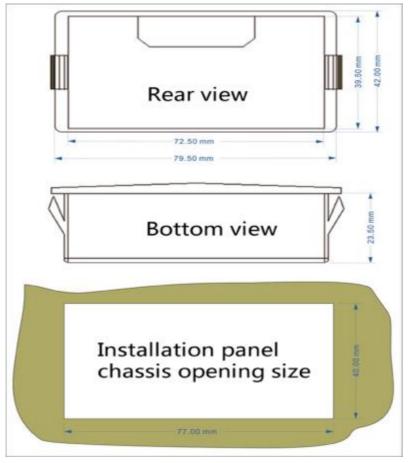
User Manual(JS-10VSG_UM_V1)

1   Characteristics：

1.1   Display mode: actual voltage;

1.2   LCD display, encoder knob adjustment;

1.3   Manual adjustment or programmable automatic output, dynamic output of continuous curve (set with encoder knob and keys);

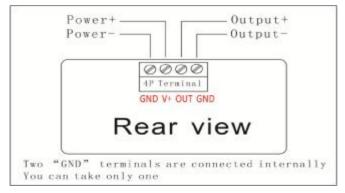1.4   Display accuracy (adjustment): 0.1 or 1.0 (coarse or fine-tuning mode can be set);

2   Technical Indicators：

2.1   Installation panel/chassis opening size: 77*40mm;

2.2   Power supply: DC7V - 28V (power supply must be 2V larger than output, such as 0 - 10V output, which can be used over 12V power supply);

2.3   Accuracy:±0.02V；

2.4   Output maximum current 200mA；

3   Size Diagram：
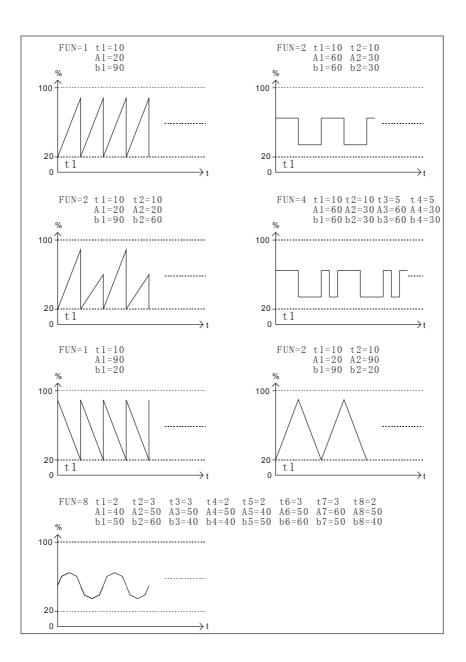

4   Wiring diagram：

Power+ ——— Output+
Power− ——— Output−

4P Terminal
GND V+ OUT GND

Rear view

Two "GND" terminals are connected internally
You can take only one

5   system operation

5.1   There are two working modes of the signal generator after power on: 1) manual regulation mode; 2) dynamic auto output mode;

5.2   Manual mode to adjust the output voltage:rotary encoder knob, clockwise voltage increases, counterclockwise voltage decreases;

5.3   Manual mode to save the output value, press the encoder knob, release, screen display "...", save successfully, the next power on output value is this saved value; when debugging equipment, we need to randomly adjust the output value, as long as you do not press the encoder knob ,output the original value after restart;

5.4   Dynamic output mode: the continuous automatic output of programmable curve cycle;

5.5   Parameter Settings: Press the encoder knob for 5 seconds and enter the setting state. The first parameter is "working mode". The screen shows FUNX X to indicate the number of segments of the curve, the rotary encoder knob to adjust the value of X, X = 0 to indicate that there is no curve, using manual mode, and X > 0 to use dynamic output mode;

5.6   After adjusting the first parameter "working mode", press the encoder knob again, if X = 0, then exit the setting mode and enter the manual mode; if X > 0, enter the first curve setting;

5.7   Each curve has three parameters, and the starting current of "AXXX" and the ending current of "bXXX" are set for "tXXX" running time. After entering the first curve setting, the screen displays "t1XX", and the rotary encoder knob adjusts the value of XX. The adjusting range of running time is 1-99 seconds;

5.8   Press the encoder knob to enter the "starting voltage" setting of the first curve. The screen shows "A1XX", and the voltage percentage setting range is 0-10;

5.9   Press the encoder knob to enter the "end voltage" setting of the first curve. The screen shows "b1XX", and the voltage setting range is 0-10;

5.10   The second curve is analogous until the number of segments is set and the setting state is automatically withdrawn;

5.11   If only one of the parameters needs to be changed next time, and the latter parameters remain unchanged, then after setting, press the encoder knob for 5 seconds to exit the setting state directly;

5.12   Examples of setting parameters for various curves：

FUN=1　t1=10
　　　　　A1=20
　　　　　b1=90

%

100

20

t1

0 ──────────────→ t

FUN=2　t1=10　t2=10
　　　　　A1=60　A2=30
　　　　　b1=60　b2=30

%

100

20

t1

0 ──────────────→ t

FUN=2　t1=10　t2=10
　　　　　A1=20　A2=20
　　　　　b1=90　b2=60

%

100

20

t1

0 ──────────────→ t

FUN=4　t1=10 t2=10 t3=5　t4=5
　　　　　A1=60 A2=30 A3=60 A4=30
　　　　　b1=60 b2=30 b3=60 b4=30

%

100

20

t1

0 ──────────────→ t

FUN=1　t1=10
　　　　　A1=90
　　　　　b1=20

%

100

20

t1

0 ──────────────→ t

FUN=2　t1=10　t2=10
　　　　　A1=20　A2=90
　　　　　b1=90　b2=20

%

100

20

t1

0 ──────────────→ t

FUN=8　t1=2　　t2=3　　t3=3　　t4=2　　t5=2　　t6=3　　t7=3　　t8=2
　　　　　A1=40　A2=50　A3=50　A4=50　A5=40　A6=50　A7=60　A8=50
　　　　　b1=50　b2=60　b3=40　b4=40　b5=50　b6=60　b7=50　b8=40

%

100

20

0 ──────────────→ t

5.13　Set coarse tuning mode: press the key to enter the setting mode, turn the knob counter-clockwise, set the mode to "FUNH", that is, manual fast coarse tuning mode, and then press the key to save and exit setup;