



Signal calibrator

Datasheet

SUP-C702S

Signal calibrator

Signal calibrator SUP-C702S

Product description:

SUP-C702S Multi-functional Hand-held Signal

Calibrator has a multiple signal Output and measurement including voltage, current and thermoelectric couple with LCD screen and silicone keypad, simple operation, longer standby time, higher accuracy and programmable output.



SUP-C702S
Signal calibrator

Features:

- Highly accurate within 0.1% of the DC voltage range for source and measure
- Source and measurement can be performed simultaneously.
- Loop power supply function (24 VDC)
- Sweep functions that allow 3 types of continuous outputs:
 - > Line out function
 - > Stepping out function
 - > Segmentation output(c/m) function

Application:

LAB Industrial field;
PLC Process Instrument;
Electric value;
other area's debugging.

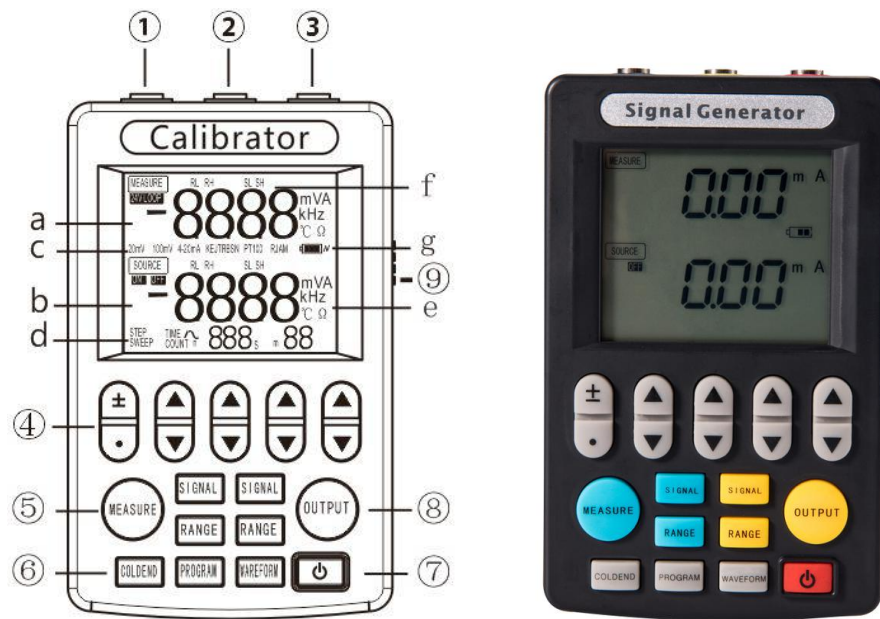
Function and system design

Technical Specifications

Item	Signal	Range	Accuracy	Resolution	Remark	
DC voltage	20mV	0.00-24.00mV	±0.2%	0.01mV		
	100mV	0.0-100.0mV	±0.2%	0.1mV		
	V	Output 0.00-15.00V	±0.2%	0.01V	Output: max current 30mA measure: input Impedance 1.2MΩ	
		Measure 0.00-30.00V	±0.2%	0.01V		
DC current	mA	0.00-24.00mA	±0.2%	0.01V		Output: max load 750Ω measure: input Impedance 100Ω
	4-20mA	4/8/12/16/20mA	±0.2%	0.01mA		
Passive current	mA	0.00-24.00mA	±0.2%	0.01mA	Output: external Power 16-30V	
Power output	24VLOOP	24V/16V	10%	0.1V	Drive Current 24mA	
Thermocouple	K	-270-1372°C	±1%	1°C	Output: start from 0°C	
	E	-270-1000°C	±1%	1°C		
	J	-210-1200°C	±1%	1°C		
	T	-270-400°C	±1%	1°C		
	R	-50-1768°C	±1%	1°C		
	B	0-1820°C	±1%	1°C		
	S	-50-1768°C	±1%	1°C		
Resistance	Ω	15.0-400.0Ω	±0.2%	0.1Ω	Output: start from 0°C	
		0.0-400.0Ω	±0.2%	0.1Ω		
The thermal resistance	PT100	-199.9-650.0°C	±0.2%	0.1°C		

Product parameter

Item	Parameter
Operating temperature and humidity	-10~55 20~80% RH
Storage temperature	-20~70℃
Size(mm)	115*70*26
Weight	300g
Power	3.7V lithium battery or 5V/1A power adapter
Power dissipation	300mA, 7~10hour
OCP	30V

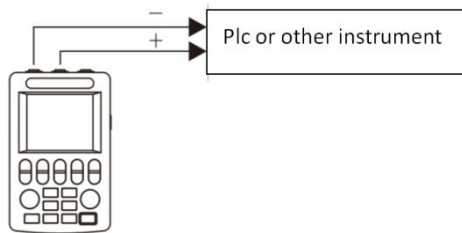


Each part and function

No.	Type	Remark
①	Common (black)	/
②	Output(yellow)	/
③	Measure(red)	/
④	Modify button	Increase and reduce the value Switch the decimal point Toggle the value plus or minus
⑤	Measure function button (blue)	【Signal】 : select the type of the signal 【Range】 : select the measuring range 【Measure】 : open/exit the output function
⑥	Cold end and program function button	【Cold end】 : show/modify cold end(only when measuring TC) 【Program】 : enable the program function 【Waveform】 : change the programmable output wave
⑦	Power	Turn on/off

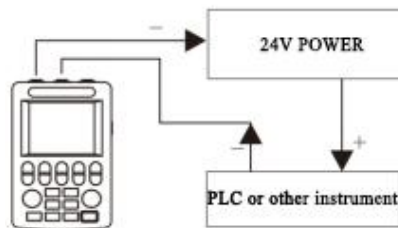
⑧	Output function(yellow)	【Signal】 : select the type of output signal 【Range】 : select the range of output signal 【Output】 : open/exit the output function
⑨	Switch (factory default off)	1. auto power off: auto power off if there's not any operation 2. manual cold end: manual setting when measuring the TC 3. passive output: output the passive current signal 4. Low power mode: output the 16v voltage to transmitter when Input the passive current.In order to reducing the power dissipation and lengthen the working time.

1. 4~20mA/TC output:



output active current/voltage to instrument

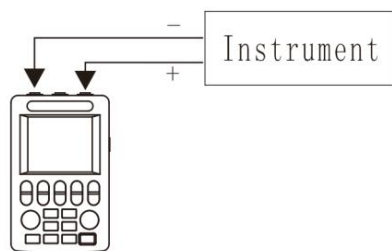
2. passive current output



2 wires transmitter simulator

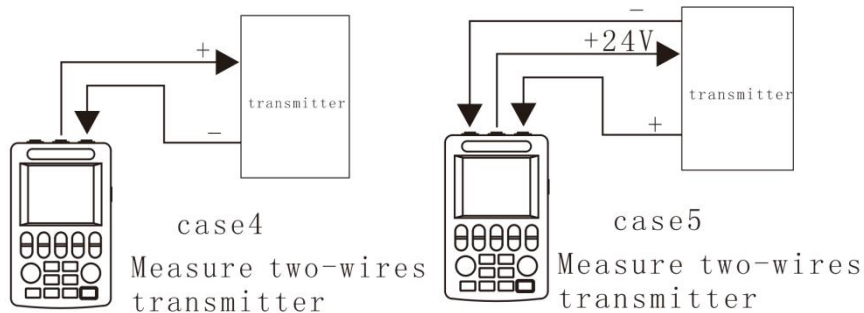
Use and wiring

3. voltage, active current measurement

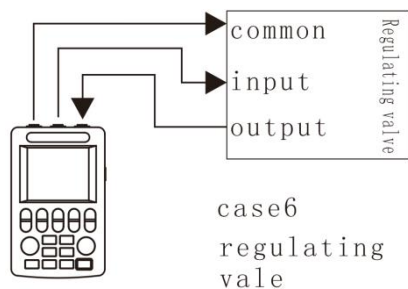


Measure voltage/active current signal

4. passive current measure



5. regulating valve

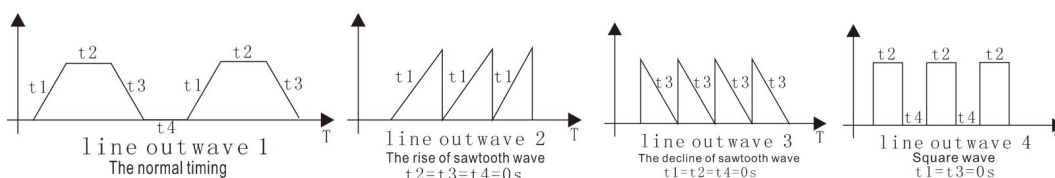


• Line out

The signal can be output linearly according to the time set by the user.

- ①press ▲ ▼ set the Main setpoint
- ②press **【waveform】**, “sweep” shows in screen, open the line out function
- ③press **【program】**, set the “time” 0-999s there’ s 4 sections(rise time/hold time[top]/fall time/hold time[low])
- ④press **【program】**, set the “count” :0-999
- ⑤⑥the same to 5.1

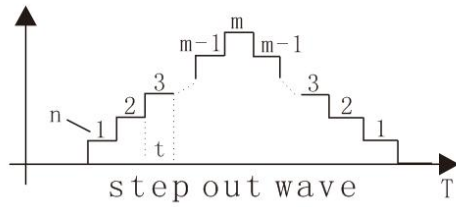
Functions



• Stepping out

The signal can be output by step according to the value set by the user.

- ①press ▲ ▼ set the Main setpoint
- ②press **【waveform】**, “step” shows in screen, open the step out function
- ③press **【program】** set “time” :0-999s
- ④press **【program】** again, set n/m
- ⑤⑥the same to 5.1



- Segmentation output(n/m)

Through segmentation you can sprite voltage, current, TC signal to n/m times output. Output value=Main setpoint*(n/m)

- ①press to change the Main setpoint
- ②press **【program】** open the segmentation output mode. Show the n/m manual
- ③press **【program】** set the M:1-20
- ④press set the N:0-m
- ⑤press **【output】** open/exit the output
- ⑥press **【program】** exit the program function.



China	Singapore	Germany	Malaysia
Supmea China Headquarters	Singapore Branch	German Branch	Malaysia Branch
Address: 5th floor, Building 4, Singapore-Hangzhou Science & Technology Park, Hangzhou, China	Address: 2 VENTURE DRIVE #11-30 VISION EXCHANGE SINGAPORE	Address: Göttinger Straße.59 30449 Hannover Niedersachsen Deutschland	Address: No 3, Jalan Emas Jaya 1, Taman Industries Emas jaya Tongkang Pecah , Batu Pahat