4-20mA Current Loop Signal Generator Manual

(Model :JS-420ISG-V2)   First edition 2018.12

1   Technical indicators：

1.1   Power supply voltage：15V---30V；

1.2   Output range：4-20mA/3-21mA；

1.3   Display mode：   Real Current / 0-100.0%/ 0-50.0Hz；

1.4   Sampling resistance：Less than 500 ohms；

1.5   Output accuracy：±0.5％；Display accuracy：0.01；
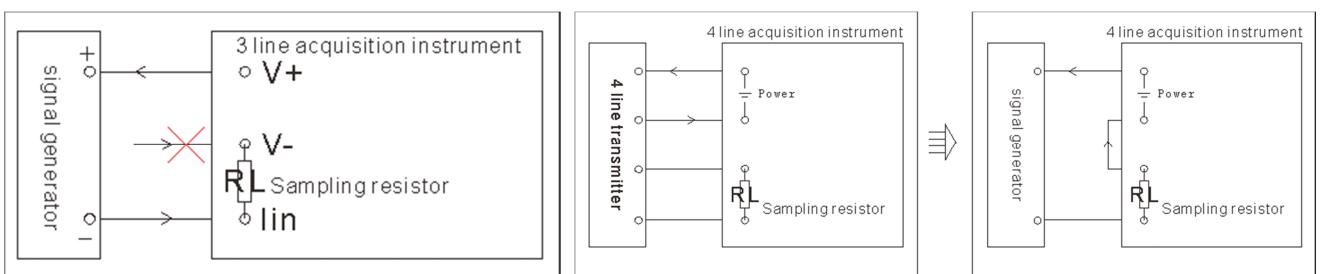
2   Wiring diagram（**Working Principle of Current Loop**）：
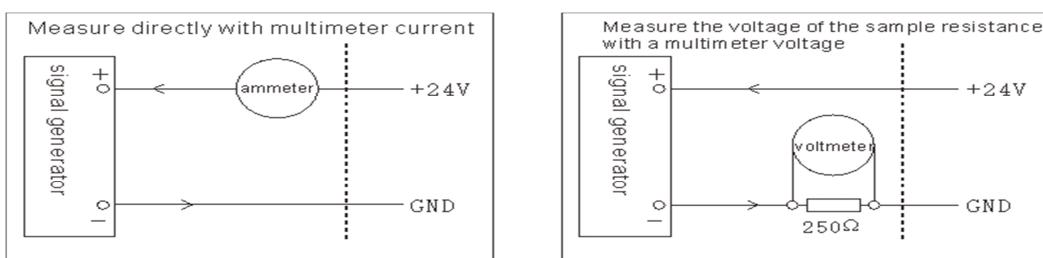
Two connection terminals are non polarity;

Anyway wiring, the principle is to generate a current loop circuit.

This signal generator can use 4-20mA to generate voltage and control the current in the circuit.

3   Simple test chart：

4   Dimension diagram：

Cabinet Installation Needs Attention ：

The instrument was stuffed in and stuck in both ears.

Panel thickness must be greater than 1.4mm.

Recommended opening size :77X40mm.

5 System operation：

5.1 **Parameter Settings**：（Rotate one grid clockwise is "+" Rotate one grid counter-clockwise is "-"，Press the knob. is "Confirm"）

5.1.1 Press and hold the knob for 2 seconds to enter the parameter setting，Display parameter number"F001"，Then press " Confirm "，to Set the value of parameter "F001"，=0 is coarse tuning；=1 Fine tuning；Then press " Confirm " to save its value；

5.1.2 When the parameter number "FXXX" is displayed，"+" "-" Rotation modification parameter number；Enter the password first "+ - - +"To enter the F002 parameter；Enter the password first "+ - + -"To enter the F100 parameter；Enter the password first "- + - +" To enter the F200 parameter；

Parameter table 1： Entering F002-F007 (System Settings) requires a password "+ - - +" first

index	designation	comments	default
F001	Output mode	0: Coarse tuning mode，"F004" How many turns to rotate 1: Fine tuning mode，"F005" How many turns to rotate 2: Quick Output (Many products only need to validate a few values and test quickly in production.) 3: Automatic Curve Output (Be used for aging products) (Mode2、3 need to set parameters"F100" "F200" >0 first)	0
F002	Output range	0:4-20mA 1:3-21mA	0
F003	Display mode	0: Real Current 1: 0-100.0% 2: 0-50.0Hz	0
F004	Add and sub value for coarse tuning mode	1-50 Addition and subtraction for each pulse，No decimal point concept (1-50)×10	1
F005	Add and sub value for fine tuning mode	1-50 Addition and subtraction for each pulse，No decimal point concept (1-50)	1
F006	Automatic save of Adjustment value	0: Not automatically saved (Need to press " Confirm " to save) 1: Automatic save	0
F007	calibration	-100 -- +100 (be cautious in revising, about 20mA±4mA)	

Parameter table 2： Entering F100… (Quick Output Settings) requires a password "+ - + -" first

index	designation	comments	default
F100	Number of Quick	0: Not Used 2-9: Point number	**0**
F101 …109	Output value of 9 points	Range:3.00-21.00mA Must be"F100">0	
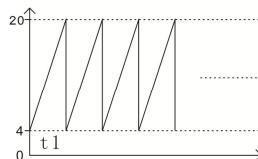
Parameter table 3： Entering F200… (Curve Output Settings) requires a password "- + - +" first

(Each curve has 3 parameters，"FtXX" Run time "FAXX" Start current "FbXX" End current)
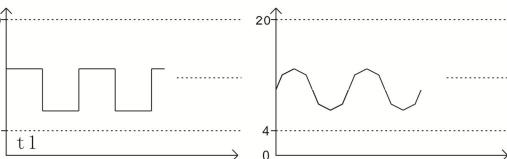
index	designation	comments	default
F200	Number of curves	0: Not Used 1-9: Segment number	**0**
Ft01	Section 1 Run time	0-999 sec. Must be"F200">0	
FA01	Section 1 Start current	3.00-21.00mA	
Fb01	Section 1 End current	3.00-21.00mA	
Ft02	Section 2 Run time	0-999 sec.	
…	…	…	
Fb09	Section 9 End current	3.00-21.00mA	

5.1.3 Examples of Automatic Curve Output Setting：