4-20mA Current Loop Signal Generator Manual
# (Model : BRT 420LGPM)   JS-420ISG-V2

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
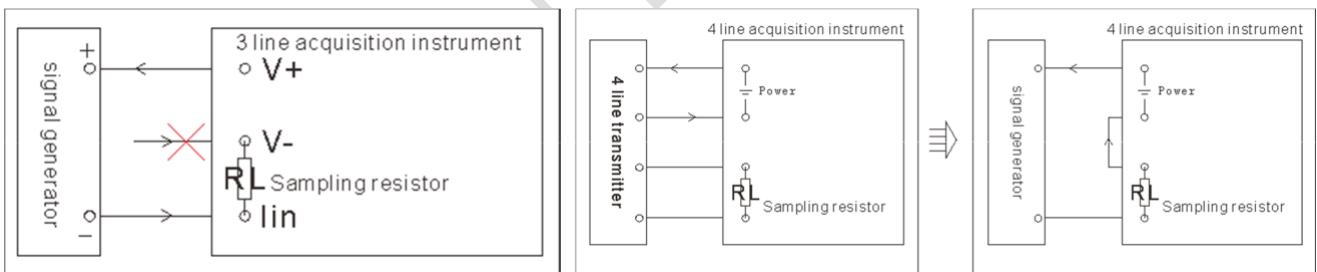
2   Wiring diagram **（Working Principle of Current Loop）**
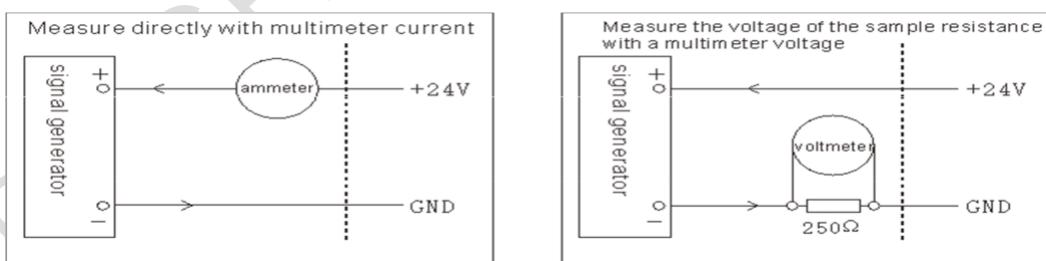
Two connection terminals are non-polarity;

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 refers **"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	

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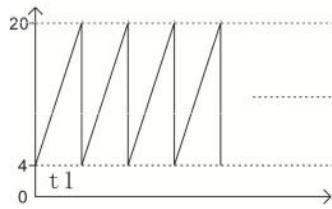
Parameter table 3：Entering F200… (Curve Output Settings) requires a password "- + - +"first

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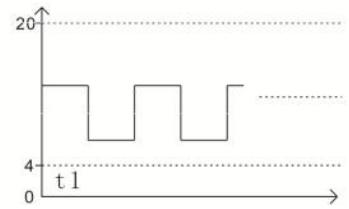
index	designation	comments		default
F200	**Number of curves**	0: Not Used 1-9: Segment number		**0**
Ft01	**Section 1 Run time**	0-999 sec. Must be"F200">0		
FA01	**Section 1 Start current**	3.00-21.00mA		
Fb01	**Section 1 End current**	3.00-21.00mA		
Ft02	**Section 2 Run time**	0-999 sec.		
...	...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

5.1.3 Examples of Automatic Curve Output Setting：
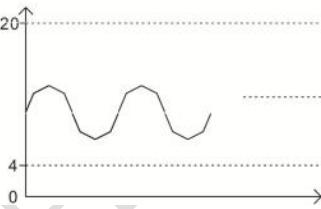
F200=1 Ft01=10
FA01=4
Fb01=20

F200=2 Ft01=10 Ft02=10
FA01=12 FA02=6
Fb01=12 Fb02=6

F200=8 Ft01=2 Ft02=3 Ft03=3 Ft04=2 Ft05=2 Ft06=3 Ft07=3 Ft08=2
FA01=9 FA02=11 FA03=12 FA04=11 FA05=9 FA06=11 FA07=12 FA08=11
Fb01=11 Fb02=12 Fb03=11 Fb04=9 Fb05=11 Fb06=12 Fb07=11 Fb08=9

*The specification is subject to change without notice. For technical support, please contact: brightwinelectronics@hotmail.com