

# ProMax CSG3 4-20ma Current and Voltage Signal Generator

ProMax CSG3 is an accurate pocket size current & voltage generator and also a measurement tool. This is a commonly used test equipment for electrical engineering and technical personnel during the installation, debugging, overhaul, and maintenance of electrical equipment on site.

It has a colour-clear LCD screen, a large capacity rechargeable Li battery, and a Micro USB port. The signal generator meter has Fast Output Mode, Manual or Automatic Output Mode, Curve Output and Signal Conversion function. The measurement and display accuracy is upto 0.01mA & 0.01V. With a simple button layout, portable enclosure, and precision display, it is an ideal simple calibration meter for industrial sites.

## Features

- Generates User Adjustable 0 to 24mA Current and 0 to 12V Voltage Signal
- Can also measure both voltage and current signals for calibration and troubleshooting
- Multiple Display Screen Layouts for different applications
- Adjustable Current Output: 0-24mA source/sink signal output, 0mA and 24mA Signals can be used to simulate Fault and Out of Range signals
- Adjustable Voltage Output: 0-12VDC, Fixed 24V output for device calibration
- Max Current And voltage: 0-23mA 0-30V input measurement.
- Internal polarity Reverse connection and Over current protection; Protection voltage 30V
- Inbuilt Rechargeable Battery, Micro USB Connector for charging
- Supports 2/3 wire 0-22mA sink or source signal
- current voltage signal conversion functions included.
- 0.01mA, 0.01V accuracy for signal output and input measurement.
- 2000mAH 3.7V rechargeable inbuilt battery Battery Charge Indicator. USB Charging is available.
- Large clear colour LCD display input and output signal Displayed.
- Offers easy and convenient handheld operation
- Has one button fast output, automatic ascending, descending and cycling output mode.
- It can be used to generate preset time v/s current signal curves to simulate dynamic signals.



## Applications

- **Multifunctional Sensor Calibrator:** Can be used to calibrate process display controllers and sensors working on 4 to 20mA or 0 to 12V voltage signals
- **Multifunctional Sensor Simulator:** Simulate multiple sensors for troubleshooting and debugging systems. Using this calibrator, engineers can identify the fault in the sensor, controller or wiring by simulating sensor output signals and running carrying out test procedures.
- **Hand-Held Operation.** Small enough to fit easily into a tool bag and to use in tight spaces. Runs an entire shift on a rechargeable Li-ion battery pack. Great for testing on the field.
- **2 operating modes:** Measure & Source (generate) —enable technicians to troubleshoot, calibrate, generate and measure signals with just one tool
- The signal calibrator can output a user-defined signal when a user enters into signal value through digit buttons.
- Debugging of industrial field PLCs
- Process Instrumentation: Signal Generators, Signal measurement, Valve Adjustment, Inverter control
- PLC & Control Panel debugging by bypassing sensors and sensor calibrations
- LED & Equipment Testing or Control



Active current output: 0-24mA

maximum load: 750Ω

Passive current output: range: 0-24mA



## 4-20MA 0-10V

With internal battery voltage hint, (UV light)when the undervoltage light is on, please turn off the charging.

## Technical Specifications

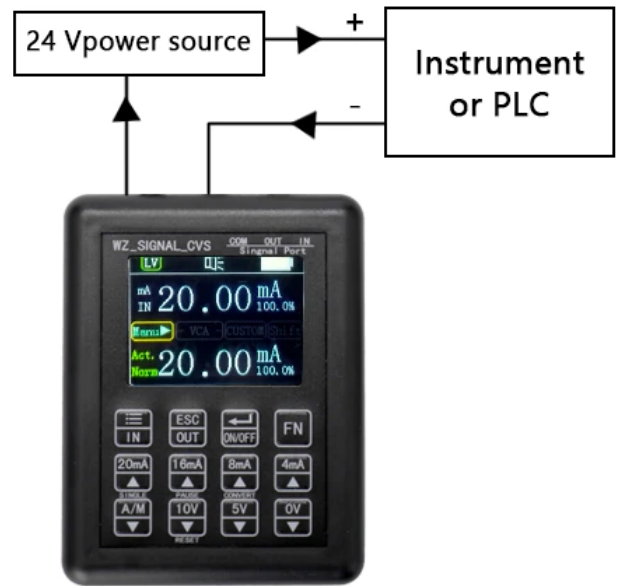
Active current source output	0-24mA, accuracy 0.01mA, max. load 750 $\Omega$ .
Sink passive current output	0-24mA, accuracy 0.01mA, external power supply max. 30V
Voltage signal output	0-12V, accuracy 0.01V
Output mode	Automatic output; Manual output; ascending, descending, cycling mode.
24V output	Driving current is 24mA, have current loop display.
Display mode	Color LCD display. can display input, output signal in the full screen
Current input measuring	0-24mA, accuracy 0.01mA
Voltage input measuring	0-30V, accuracy 0.01V
Input to output switching	Can be voltage to current source mode, sink mode, current to voltage mode switching, one button fast output.
Additional output function	Customized output, user can set any min. output value and max. output value.
Language	English default; Simplified Chinese; Traditional Chinese
Battery	2000mAH large capacity rechargeable Li battery.
Battery durability	6 hours operating time at 20mA output.
Port	Micro USB port for power supply and battery recharging.
Protection Circuit	Polarity reverse connection protection, over current protection, protection voltage 30V.
Operating Temperature	0-50 $^{\circ}$ C
Size	90x70x28mm

## Connection

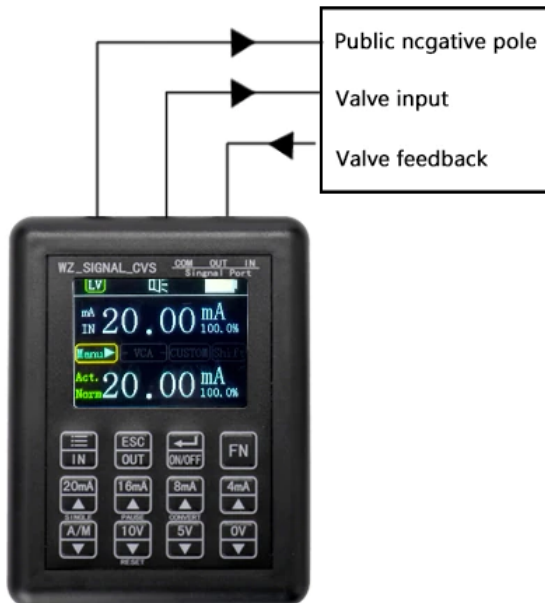
active two-wire transmitter measurement method



passive current output two-wire connection method



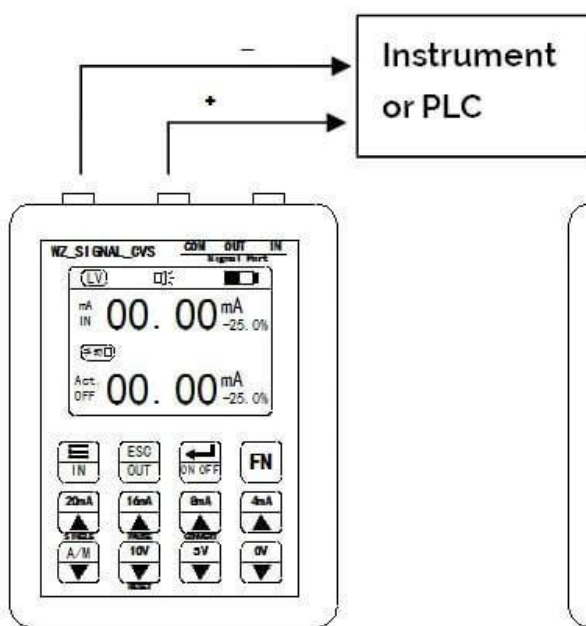
adjusting valve connection method



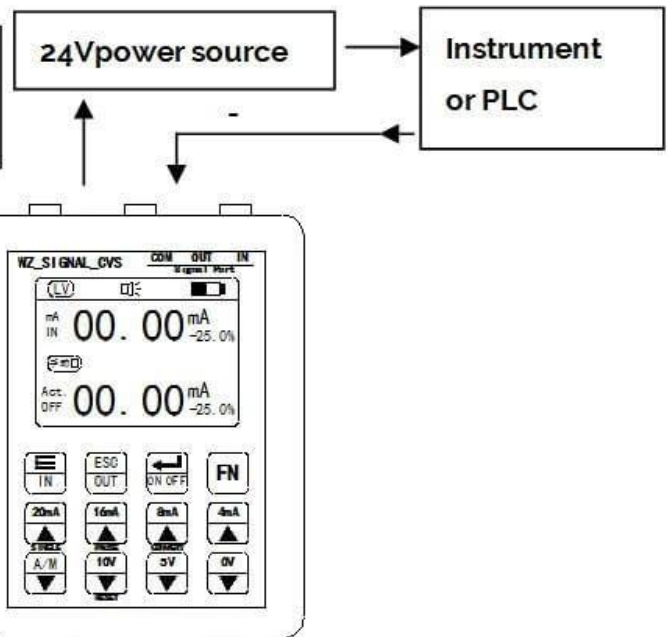
three-wire sensor test method



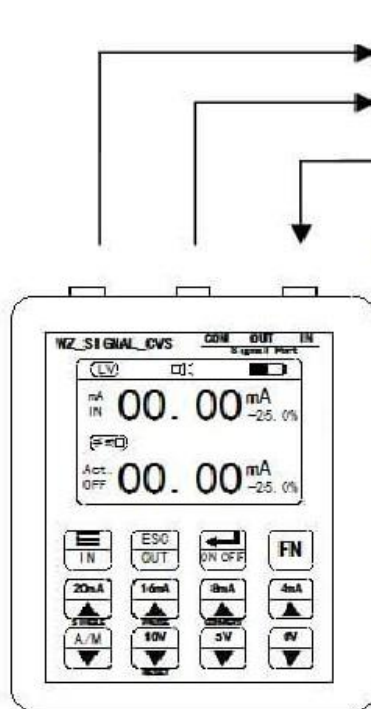
(1) active two-wire transmitter measurement method



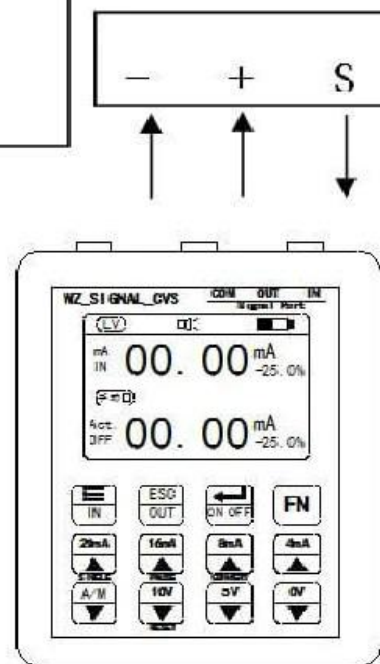
(2) Passive current output two-wire connection method



(3) adjusting valve connection method



(4) three-wire sensor test method



## Terms and Conditions Agreement

### Read and understand this catalogue.

Please read and understand this catalogue before purchasing the products. Please consult your ProMax sales/technical representative if you have any questions or comments.

### Warranties.

(a) Warranty. ProMax does not offer any warranty/guarantee/replacement/returns for products once sold. Since these products are used in research/testing/production with other components, it is beyond our scope to determine the working of our product in your application. ProMax disclaims all other warranties, express or implied.

(b) Limitations. ProMax MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. THE BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

ProMax further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right.

(c) Buyer Remedy. ProMax sole obligation hereunder shall be, at ProMax's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall ProMax be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless ProMax analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification or any other reason. Return of any Products by Buyer must be approved in writing by ProMax before shipment. ProMax Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information is given orally or in writing, are not to be construed as an amendment or addition to the above warranty. See <http://www.probots.co.in/> or contact your ProMax representative for published information.

### **Limitation on Liability; Etc.**

ProMax COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of ProMax Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use. ProMax Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, ProMax will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE ProMax PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

### **Programmable Products.**

ProMax Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof. Performance Data.

Data presented in ProMax Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of ProMax's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the ProMax's Warranty and Limitations of Liability.

### **Change in Specifications.**

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made.

However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your ProMax's representative at any time to confirm actual specifications of purchased Product. Errors and Omissions. Information presented by ProMax Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.