TAYLOR HOBSON® | Solartron Metrology

AMETEK

Compass

COMPASS SC1 & COMPASS SCD1 SIGNAL CONDITIONERS

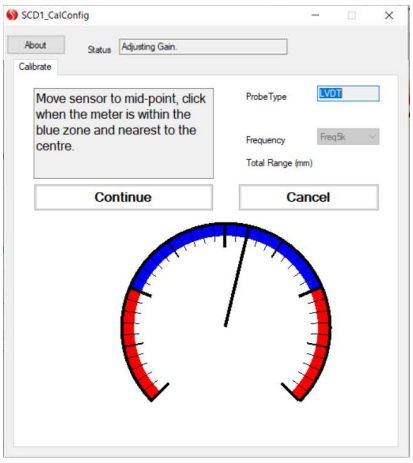
Solartron's new "all in one" signal conditioner accepts any standard LVDT or Half bridge analog probes with 5 Pin DIN connectors. The single channel conditioner includes a DC output, I/O connection, and a USB port.

SC1

SCD1

KEY FEATURES

- Single input channel with or without display. Display has six digits resolution.
- Connects any LVDT or Half Bridge probe
- Accepts Marposs and Tesa Spec'd inputs
- Output via +/- 10 VDC, 0-10 VDC, Modbus, or via USB into Orbit GCS software
- +10 to – 10 V digital limit I/O option
- Easy setup to Windows PC via USB plug
- Status LEDs on casing are configurable by software
- DIN Rail Mount



Free Calibration software pack

Option to output to Orbit GCS

Output to PLC via DC or Modbus

REAL PRECISION. REAL SOLUTIONS.

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CDCR Number: 23071 Issue Number 24/04 Datasheet Number 503921

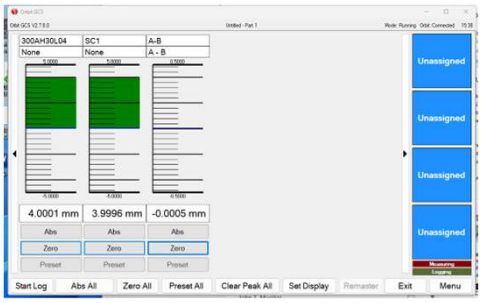
LAYOUT AND DIMENSIONS

Go/No Go LEDs

Buttons for setup **Go/No Go LEDs**

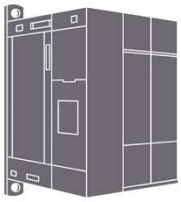
Both SC1 and SCD1 have same outer dimensions

INPUT AND OUTPUT OPTIONS



Plug any LVDT up to 300 mm. Full Bridge, Half Bridge, Tesa Spec, Marposs spec

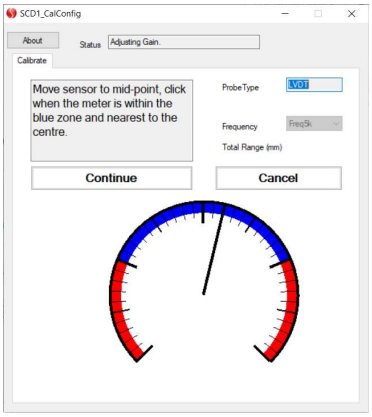
+/- 10 VDC
or 0-10 VDC



Power with 5 V from USB port or 24 V via power pack

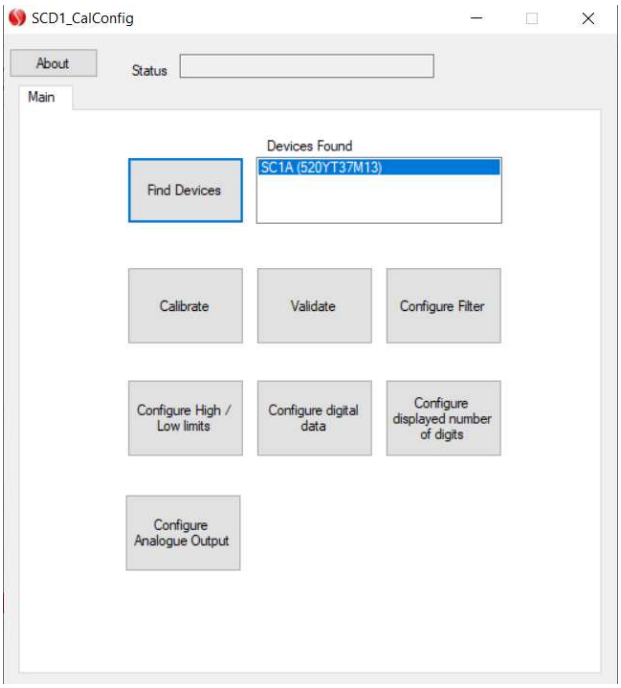
Modbus

I/O Option

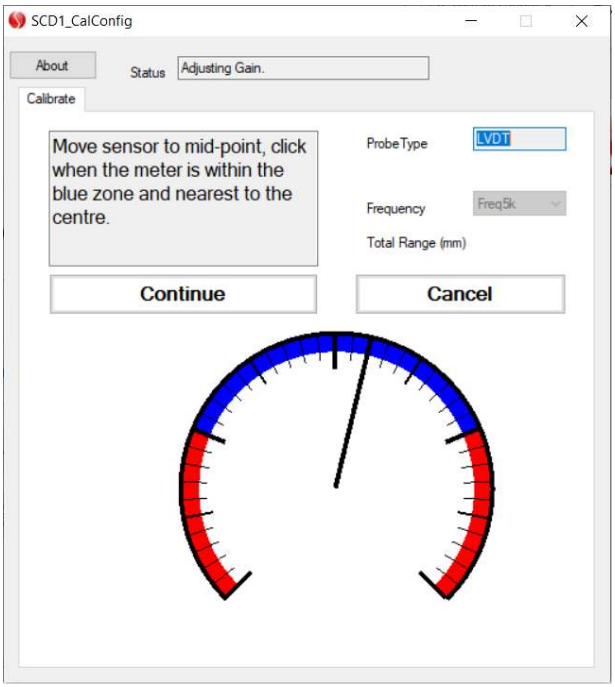


Set up and calibrate Compass units with free software pack. Includes calibration with sensitivity, analog output, as well as Modbus settings

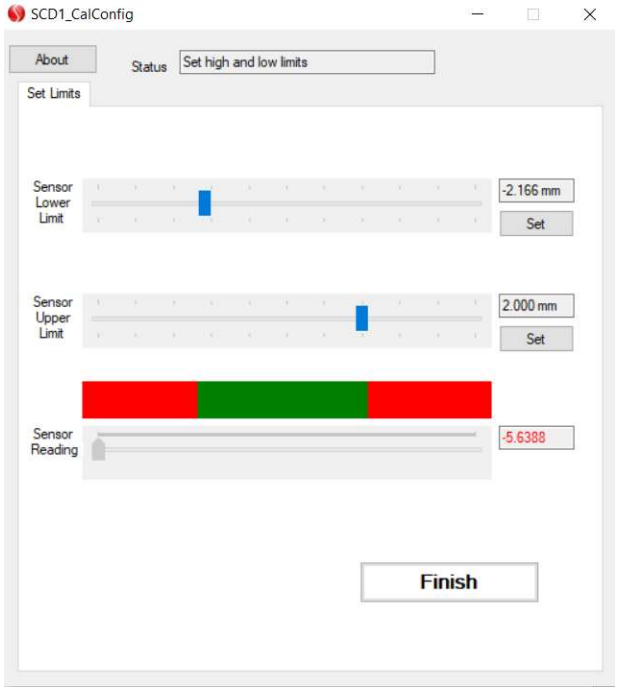
SOFTWARE SETUP



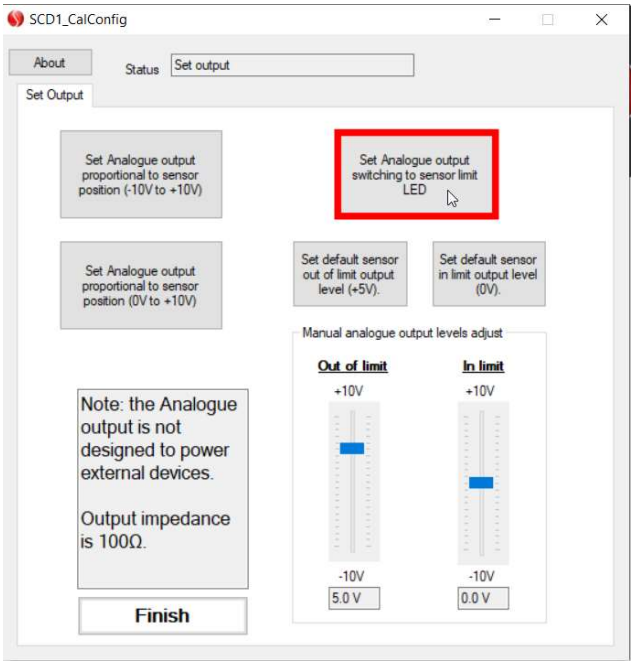
Setup pack is easily downloadable from Solartron website. Plug and Play



Step by step guide for calibrating each analog probe. Choose from 3 K to 20 K frequency



Set Upper and Lower Limits



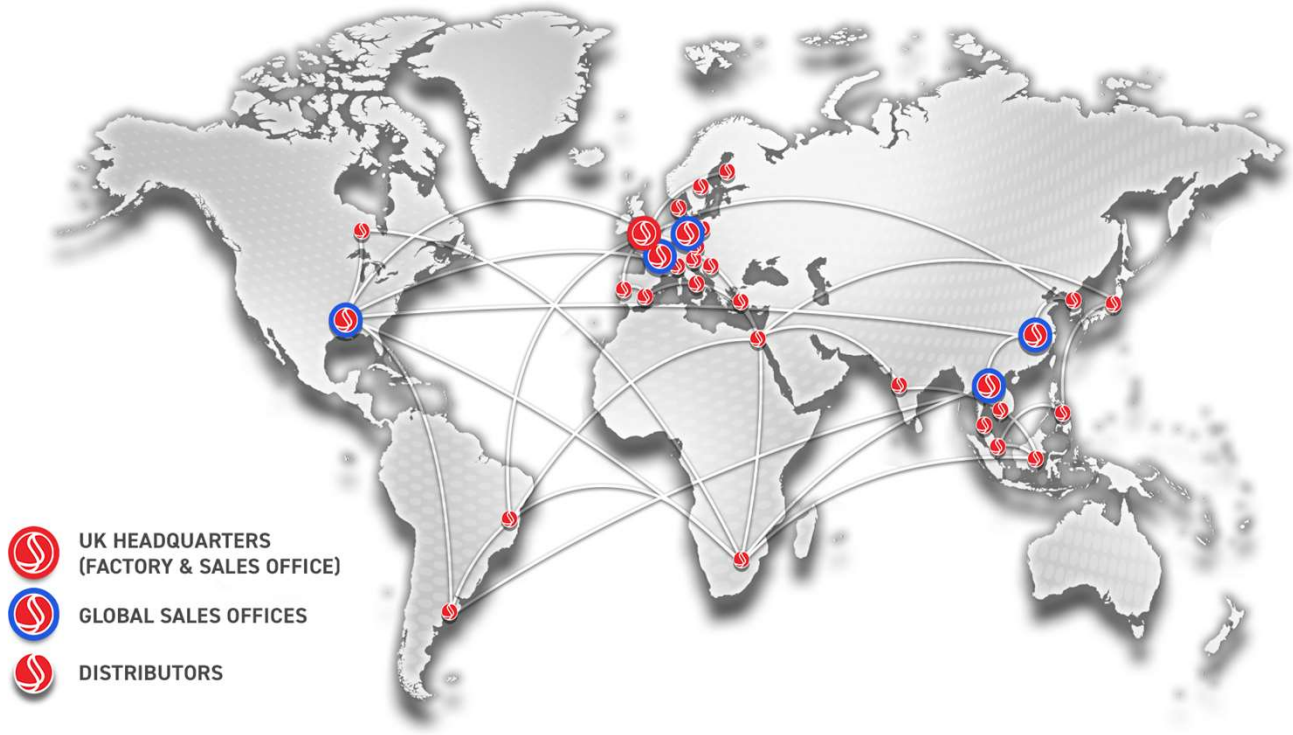
Set I/O outputs or Voltage output

SPECIFICATIONS

PRODUCT	Units	SC1-A	SCD1-A (Display)
Number of Channels		1	1
Inputs		LVDT, Half Bridge, TESA spec, Marposs	LVDT, Half Bridge, TESA Spec, Marposs
Input Connection		5 Pin DIN	5 Pin DIN
Linearity	%FSO	0.02	0.02
Output Resolution (Digital Output via USB or Modbus)		18 bit	18 bit
Output Data Rate	ms	10	10
Thermal Drift	µ/deg C	0.5	0.5
PHYSICAL PARAMETERS			
Weight	grams	~100	~100
Casing		PA Nylon 12	
ENVIRONMENTAL			
Electronics Operating Temperature	°C	0 to +50	
Storage Temperature	°C	-20 to +70	
Operating Temperature	°C	0 to +60	
Sealing		IP43	
ELECTRONICS INTERFACE			
Output Options		+/- 10 VDC, Modbus over Serial, USB (into Orbit GCS Software), I/O	
Power		USB (5V) or 24V DC power pack with USB plug	

Optional 24 V Power Pack

Worldwide Sales Offices



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Solartron Metrology also carries an extensive network of sales agents in all major countries. For a local contact, go to www.solartronmetrology.com/contact or email at sales.solartronmetrology@ametek.com