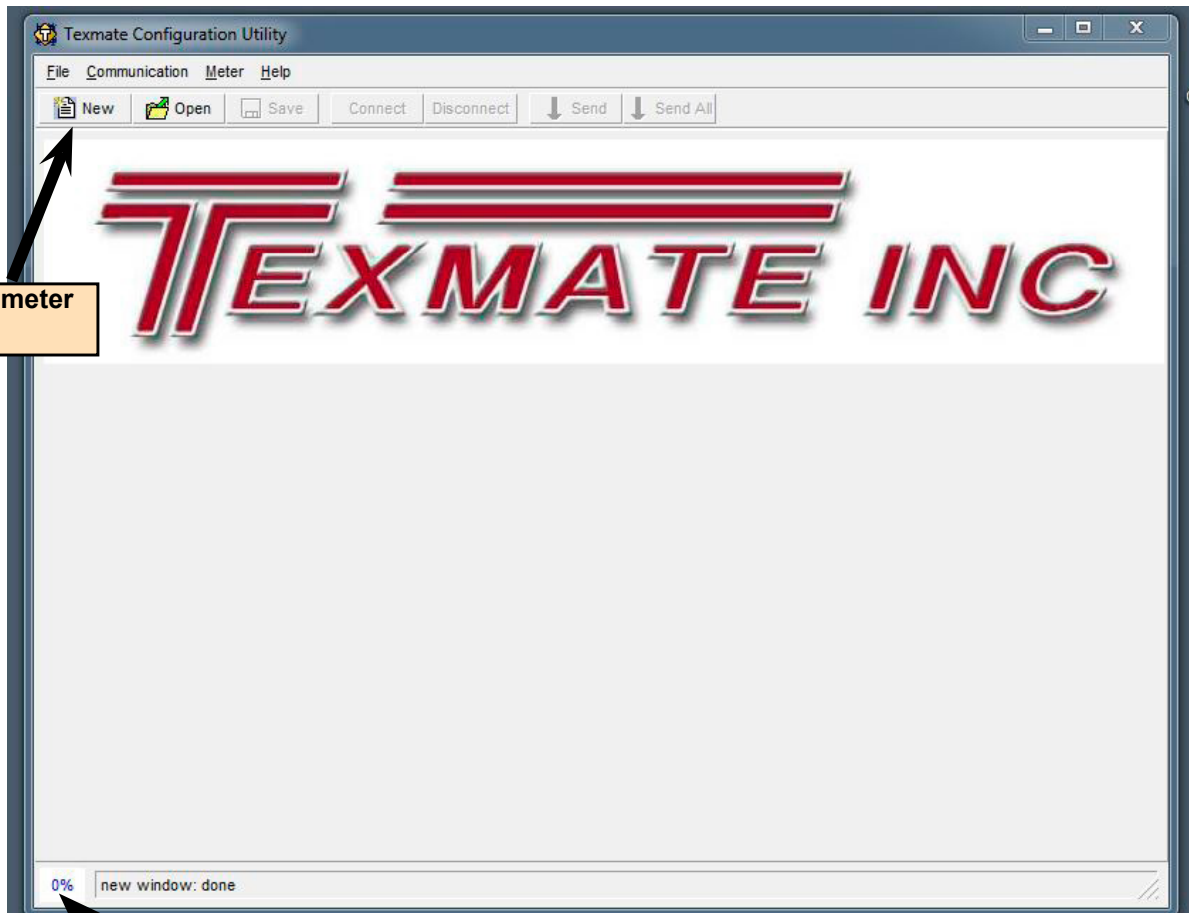


## Instruction for using the Tiger meter/controller configuration utility



Create a new meter configuration

Communication Buffer: Indicates the amount of communication requests to be processed.

### File menu

#### New

-Create new configuration.

#### Open

-Opens a configuration.

#### Import

-Add (partial) configuration file (i.e. compiled macro) to current configuration.

#### Save

-Save configuration file.

#### Verbose Output File

-Only recommended for debugging.

### Communication menu

#### Connection...

-Change communication settings to connect to a similar meter.

Choose Communication:	
Serial (COM-port)	▼
Choose Parameters:	
Device	com5
Baudrate	9600
Parity	None
Connection Settings:	
Meter ID	1

#### Connect and Disconnect

#### Send

-Send only changes to the meter.

#### Send All

-Send complete configuration.

### Meter menu

#### Change Meter Comm. Setting

#### Show Changed Registers

-Registers sent on Send/Send Changes.

1. Select model being connected from the list.  
for example: "DI50TV3.06-08"

2. Select serial or ethernet

Serial (COM-port)  
TCP/IP

**New Meter**

Choose Meter Type:  
DI50E V3.06-08

Choose Communication:  
Serial (COM-port)

Choose Parameters:  
Device com5  
Baudrate 9600  
Parity None

Connection Settings:  
Meter ID 1  
 Connect now  
 Upload now  
Do not upload macros

OK Cancel

Select proper COM port

Connect and upload only meter type information

Upload complete meter setup

**New Meter**

Choose Meter Type:  
Automatic (always connects)  
Automatic (always connects)  
- Tiger 320 E  
DI50E V3.06-08  
DI50EAN6 V3.06-08  
DI50EB51 V3.06-08  
DI503E V3.06-08  
DI60E V3.06-08  
DI60AE V3.06-08  
DI60XE V3.06-08  
DI602AE V3.06-08  
DI802XAE V3.06-08  
FIB101D50E V3.06-08  
GI50E V3.06-08

GI50T V3.06-08  
GI50TB101 V3.06-08  
DI40T V3.09  
- Custom interfaces

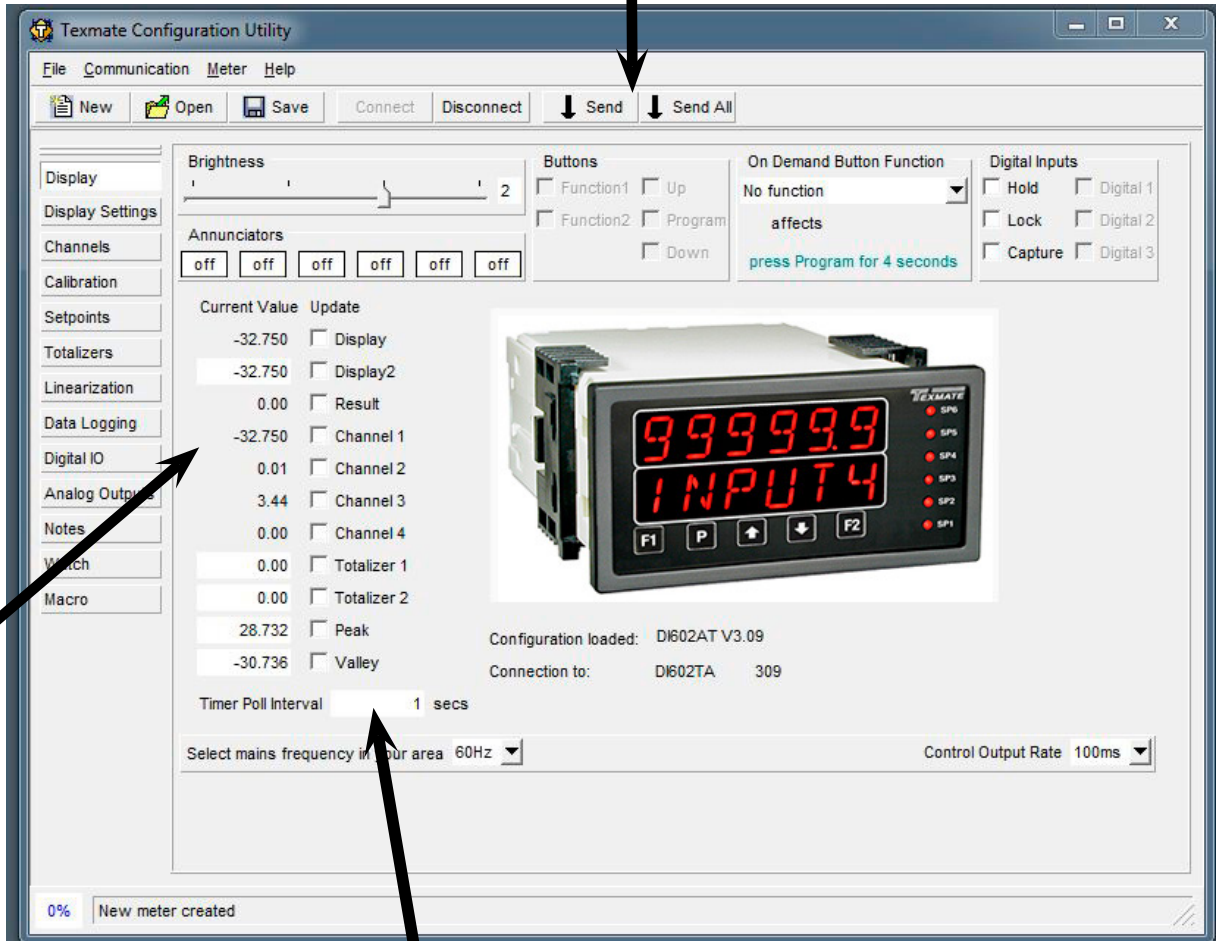
3. Select

Do not upload macros  
Upload only existing macro  
Upload complete macro area

**Display**

**Send**  
-Send only changes to the meter.

**Send All**  
-Send complete configuration.

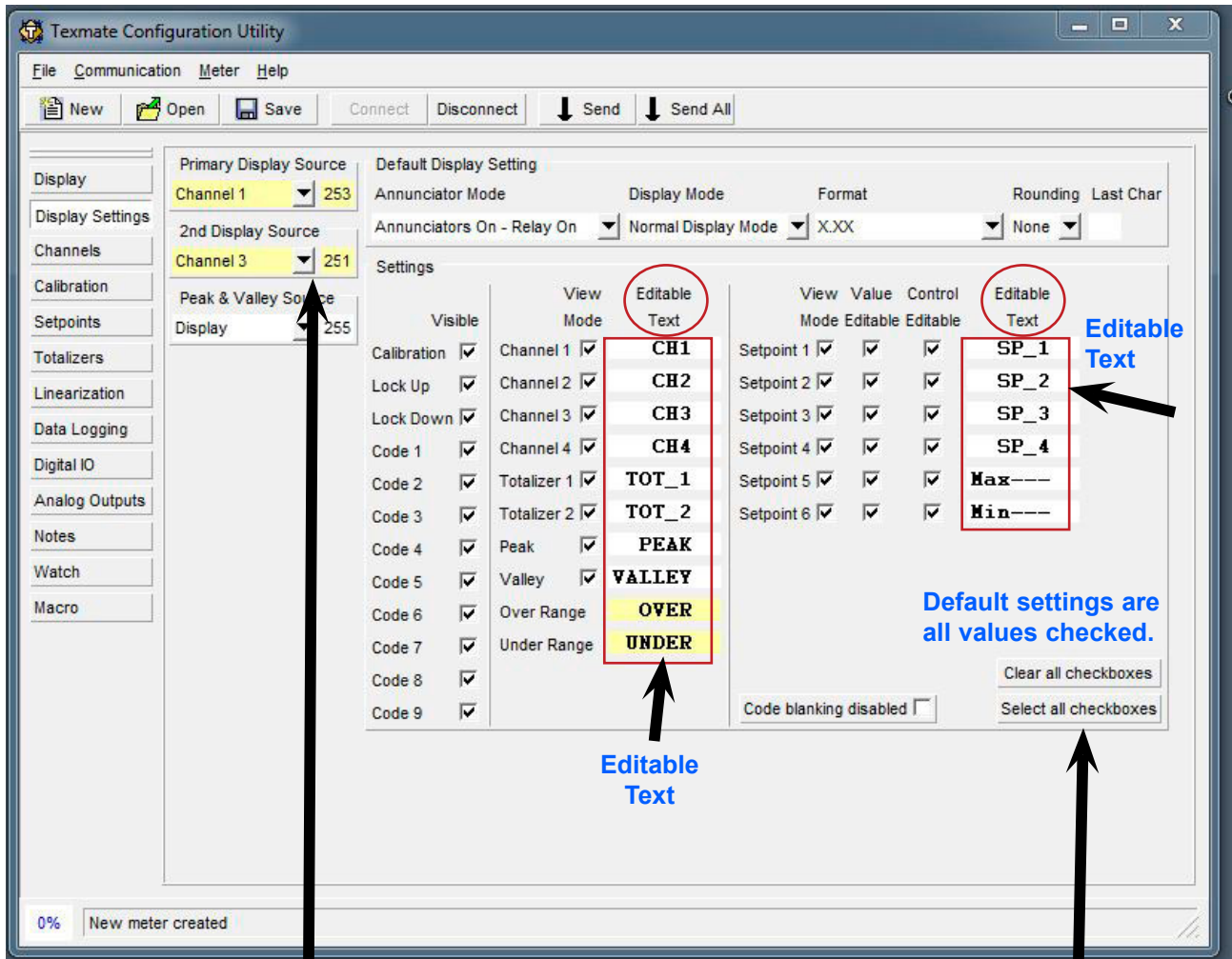


Checkboxes for channels to be monitored.

Please see the meter label for the number of input channels

Adjust Timer Poll Interval for registers checked above.

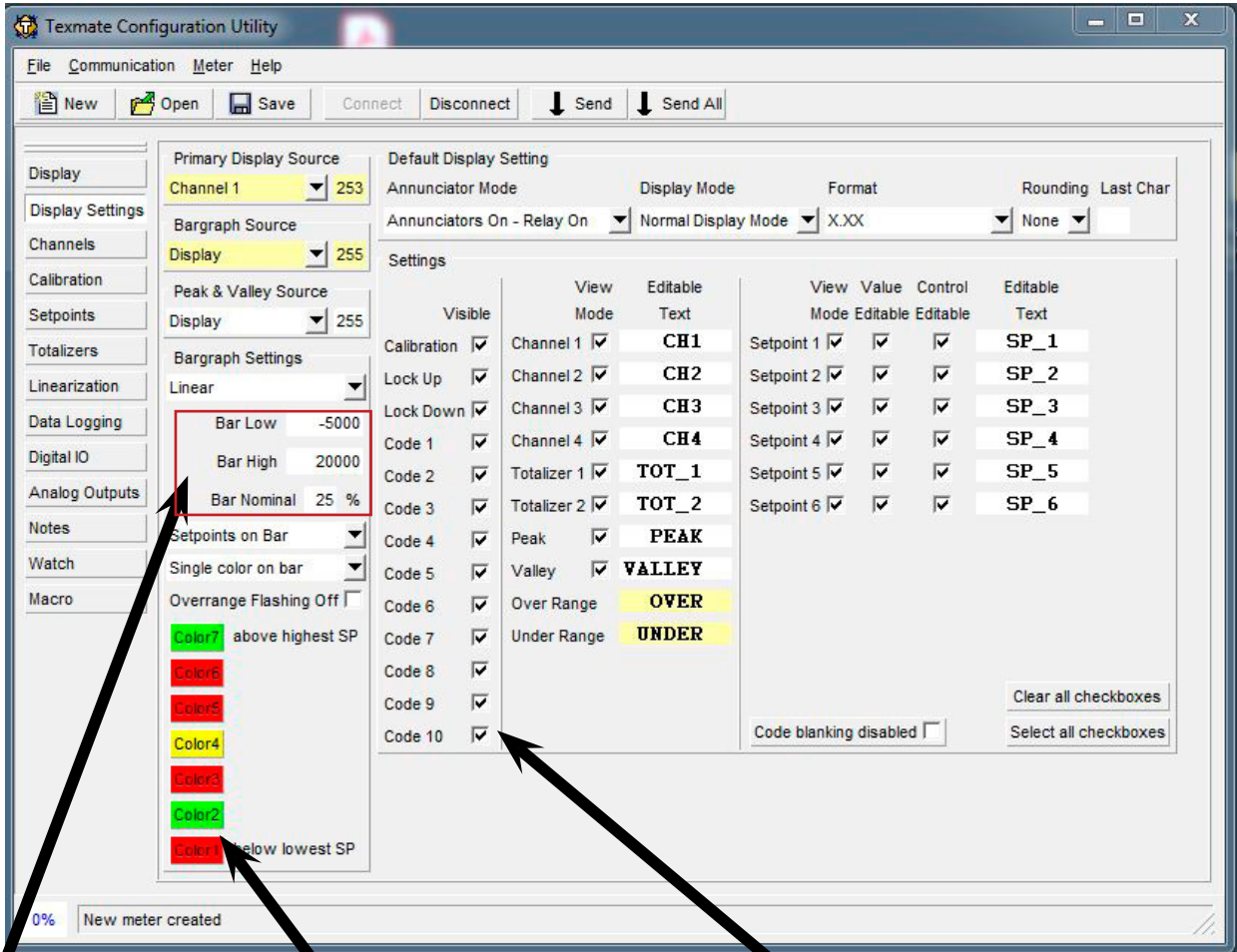
**Display Settings for DI-602AT V3.06+**



Select display source by name from the list or enter the register number directly.

By selecting "Clear all checkboxes", all codes and setpoints will be made non-visible.

**Display Settings for FI-B101D50T and GI-50EB101 V3.06+**



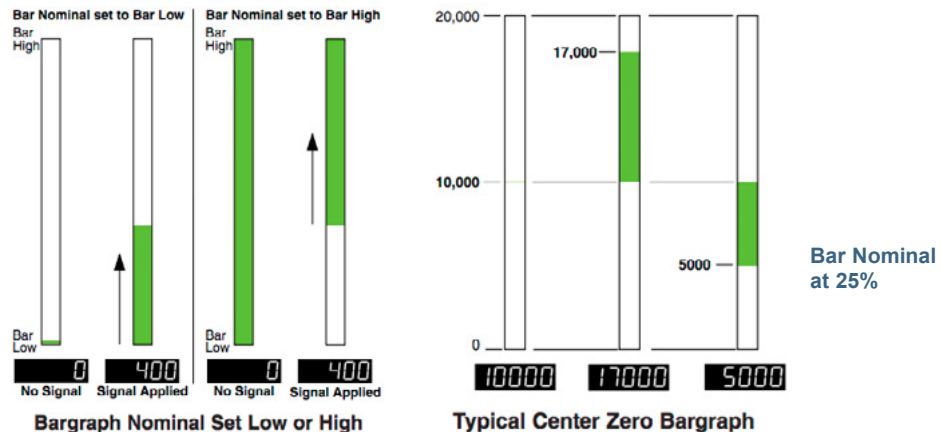
Enter and select bar scale values, e.g. Bar Low = -5000 and Bar High = 20000

Click on the color button to change the bar color (green, red, yellow, off) below lowest SP, between lowest and second lowest setpoint, ..., above highest setpoint.

Code 10 is only available on bargraph meters.

This function only available when a tricolor bar is used

Bar Nominal sets the point on the bargraph at which the bar begins to light up. This can be any position between and including the bar low and bar high settings.

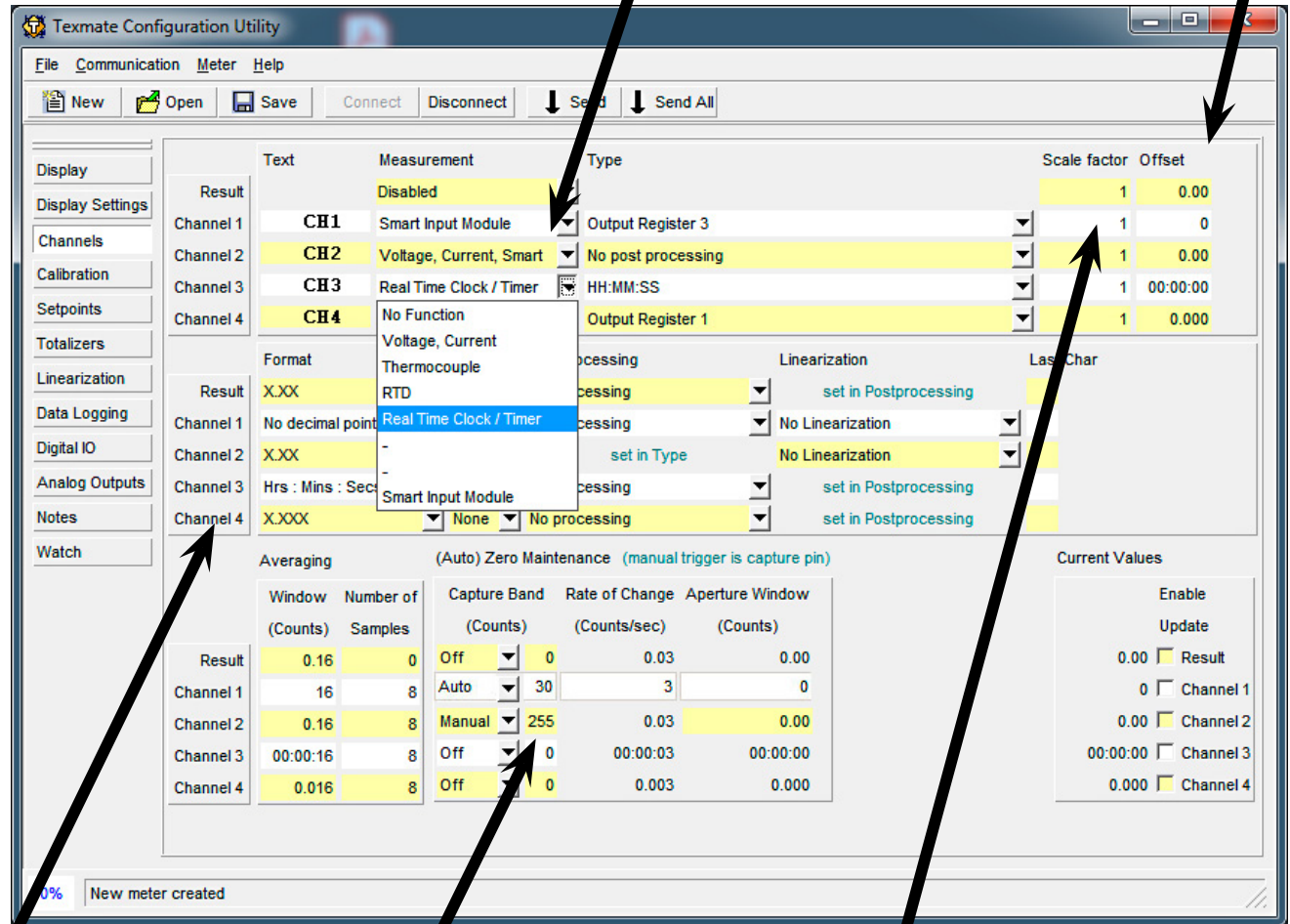




**Channels Settings**

Input source selection for CHI through CH4 (please see meter label for input type)

Offset setting for CH1 thru CH4



Decimal point selection for CH1 through CH4 + result

Capture band between 1-254 -> Auto

Scale factor setting for CH1 thru CH4

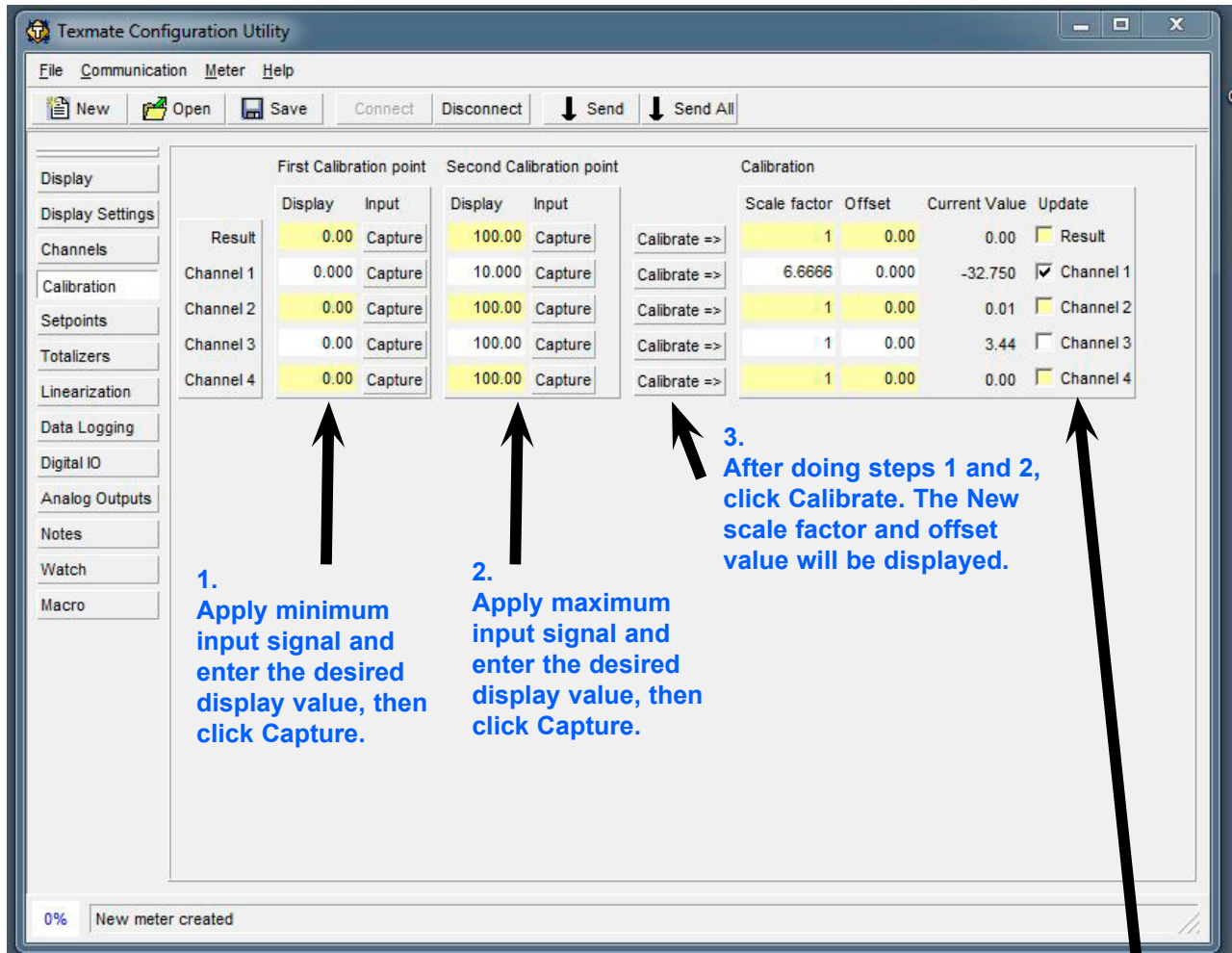
**Calculating Scale Factor**

$$\frac{\text{Present Scale Factor} \times \text{Required Reading}}{\text{Present Reading}} = \text{New Scale Factor}$$

**example:**  $\frac{3.3333 \times 9000}{4024} = 7.4552$

Note: Maximum scale factor value can not exceed 9.9999

**Calibration steps for the respective channel in use**



1. Apply minimum input signal and enter the desired display value, then click Capture.

2. Apply maximum input signal and enter the desired display value, then click Capture.

3. After doing steps 1 and 2, click Calibrate. The New scale factor and offset value will be displayed.

Select the check box on each channel to view the updated calibration value.

To test the accuracy of the calibration, apply both minimum and maximum signals to verify that the meter's readings are correct.

**Setpoint (Relay) Settings**

Relay source settings - Ch1, Ch2, Ch3, or Ch4

Relay trip value settings

This will select if relay is "Normally Open" (above) or "Normally Close" (below)

**Table 1: Setpoint Settings**

Name	Source	Source Register	Value	Relay	Activation
Setpoint 1	From Register	Channel 253	18000	No Latching	Above
Setpoint 2	From Register	Off	-180.00	No Latching	Above
Setpoint 3	From Register	Off	50.00	No Latching	Above
Setpoint 4	From Register	Off	-50.00	No Latching	Above
Setpoint 5	From Register	Off	100.00	No Latching	Above
Setpoint 6	Hold Pin	Off	-100.00	No Latching	Above

**Table 2: Relay Configuration**

Mode	Count	Tracking	Display	Timer	Resolution	Time(s)	Time(s)
Hysteresis	10	Off	Flash	Pulse	100ms	Make Delay 0.0	Max ON Time 0.0
PID	0.00	Off	Flash	Off	100ms	Make Delay 0.0	Break Delay 0.0
Off	0.00	Setpoint 1	Flash	Off	100ms	Make Delay 0.0	Break Delay 0.0
Off	0.00	Off	Flash	Off	100ms	Make Delay 0.0	Break Delay 0.0
Off	0.00	Off	Flash	Off	100ms	Make Delay 0.0	Break Delay 0.0
Off	0.00	Off	Flash	Off	100ms	Make Delay 0.0	Break Delay 0.0

**Table 3: Trigger Settings**

Trigger	Destination Register	Reset Mode	On Trigger	Status
Disabled	Off	0 Constant	<input type="checkbox"/> Print <input type="checkbox"/> Log	off
Disabled	Off	0 Constant	<input type="checkbox"/> Print <input type="checkbox"/> Log	cc
Disabled	Off	0 Constant	<input type="checkbox"/> Print <input type="checkbox"/> Log	off
Disabled	Off	0 Constant	<input type="checkbox"/> Print <input type="checkbox"/> Log	cc
Disabled	Off	0 Constant	<input type="checkbox"/> Print <input type="checkbox"/> Log	off
Break Edge	Tare	14 Constant	<input type="checkbox"/> Print <input checked="" type="checkbox"/> Log	cc

**Table 4: P.I.D. Settings**

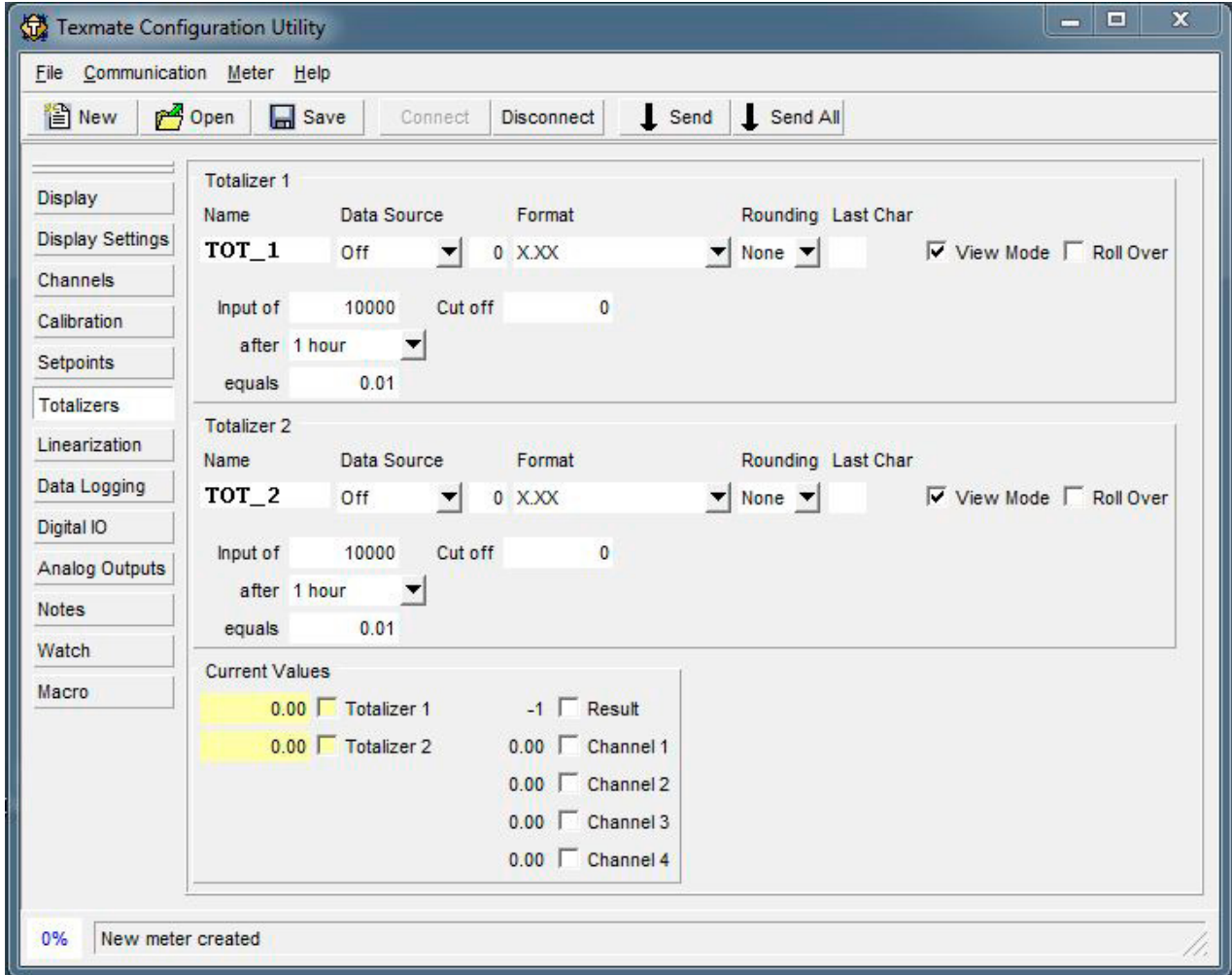
Span	Proportional	Integral	Derivative	Anti Reset Windup	Min. Cycle Time
Setpoint 1	0.0	1.0	0.0	100.0	1.0
Setpoint 2	0.0	0.0	0.0	100.0	1.0

For more advanced relay functions, please see Setpoints and Relays Supplement (NZ201)

[https://www.texmate.com/media/pdf/2019/05/set\\_points\\_relays\\_NZ201.pdf](https://www.texmate.com/media/pdf/2019/05/set_points_relays_NZ201.pdf)



**Totalizer 1 and 2 settings**



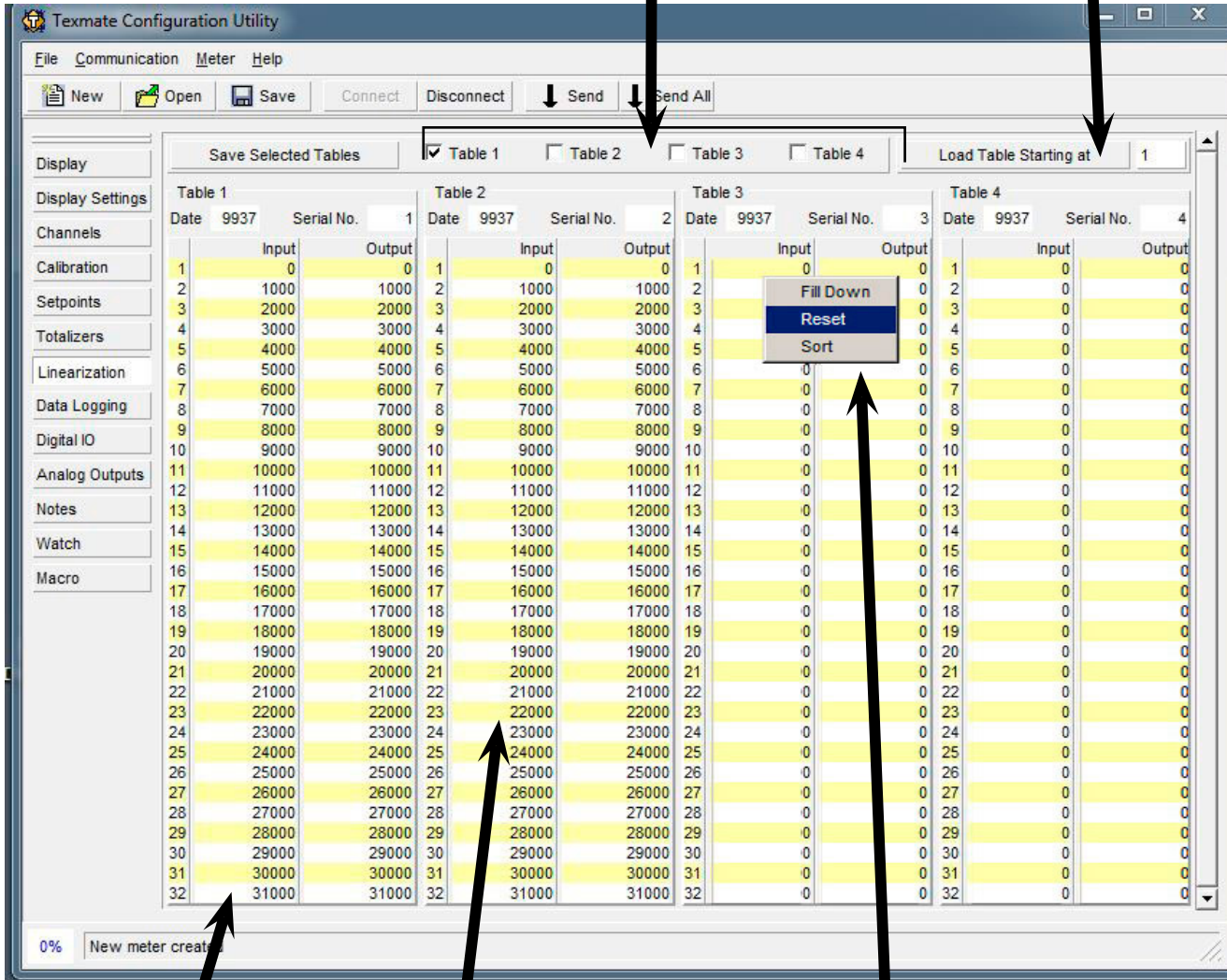
**Please refer to Totalizing Supplement (NZ208)**

[https://www.texmate.com/media/pdf/2019/05/totalizing\\_NZ208.pdf](https://www.texmate.com/media/pdf/2019/05/totalizing_NZ208.pdf)

**Linearization table settings**

Only consecutive tables (i.e. 1-3, 2-4) can be saved.

Load tables from the file and enter them consecutively starting at this table number.



**Reset**

**Fill Down**

**Right-click menu:**

**Fill Down**

-Use the values of the current line for the rest of the table.

**Reset**

-Return current table to factory default.

**Sort**

-Sort current table in ascending order (tables have to be sorted to work properly).

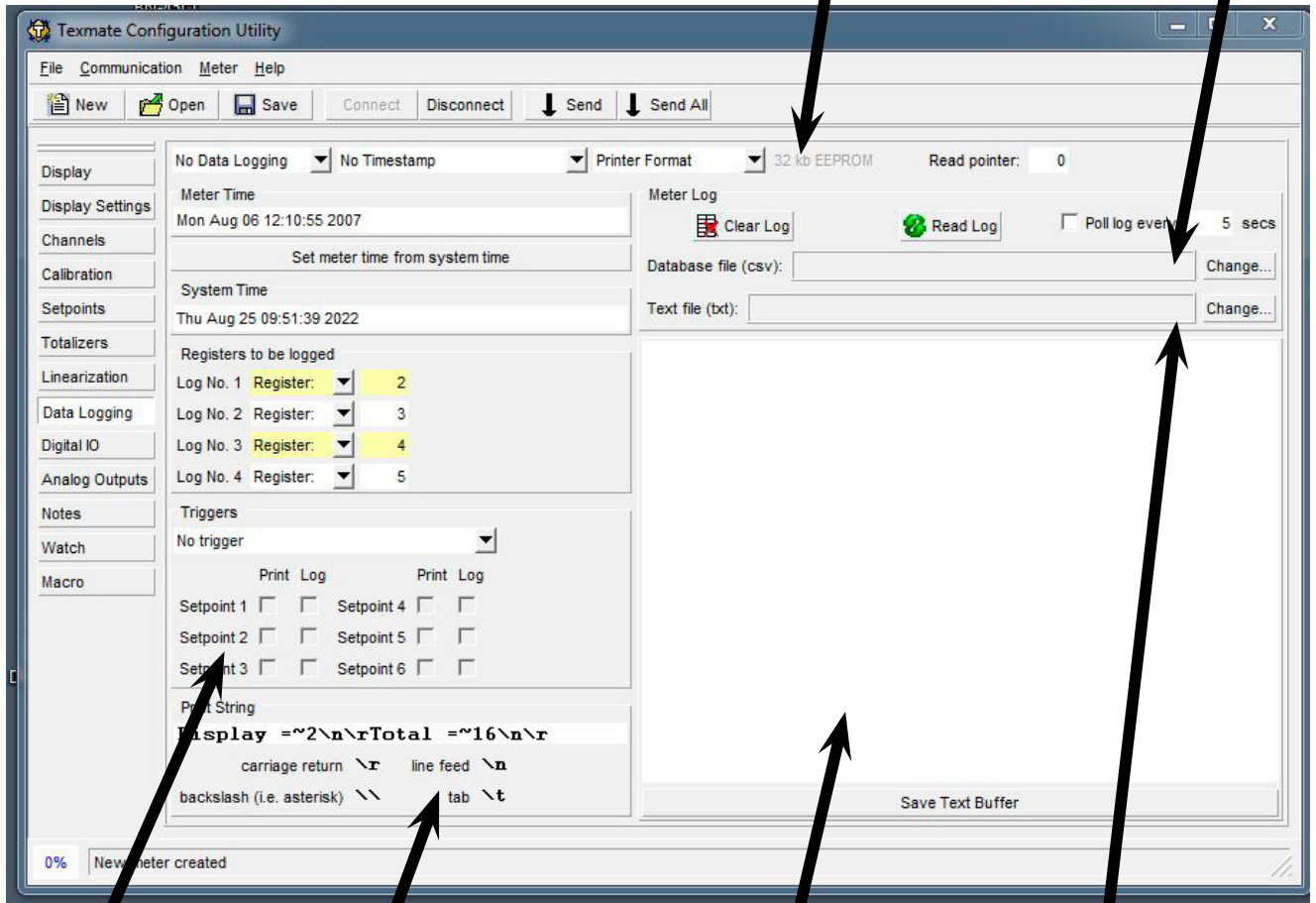
Please refer to Linearizing Supplement (NZ207)

[https://www.texmate.com/media/pdf/2019/05/linearization\\_NZ207.pdf](https://www.texmate.com/media/pdf/2019/05/linearization_NZ207.pdf)

To be used with data login options only

Memory size for data logging.

Save log data in CSV format on Read Log.



Only available if the setpoint is set up as a trigger on the Setpoints page.

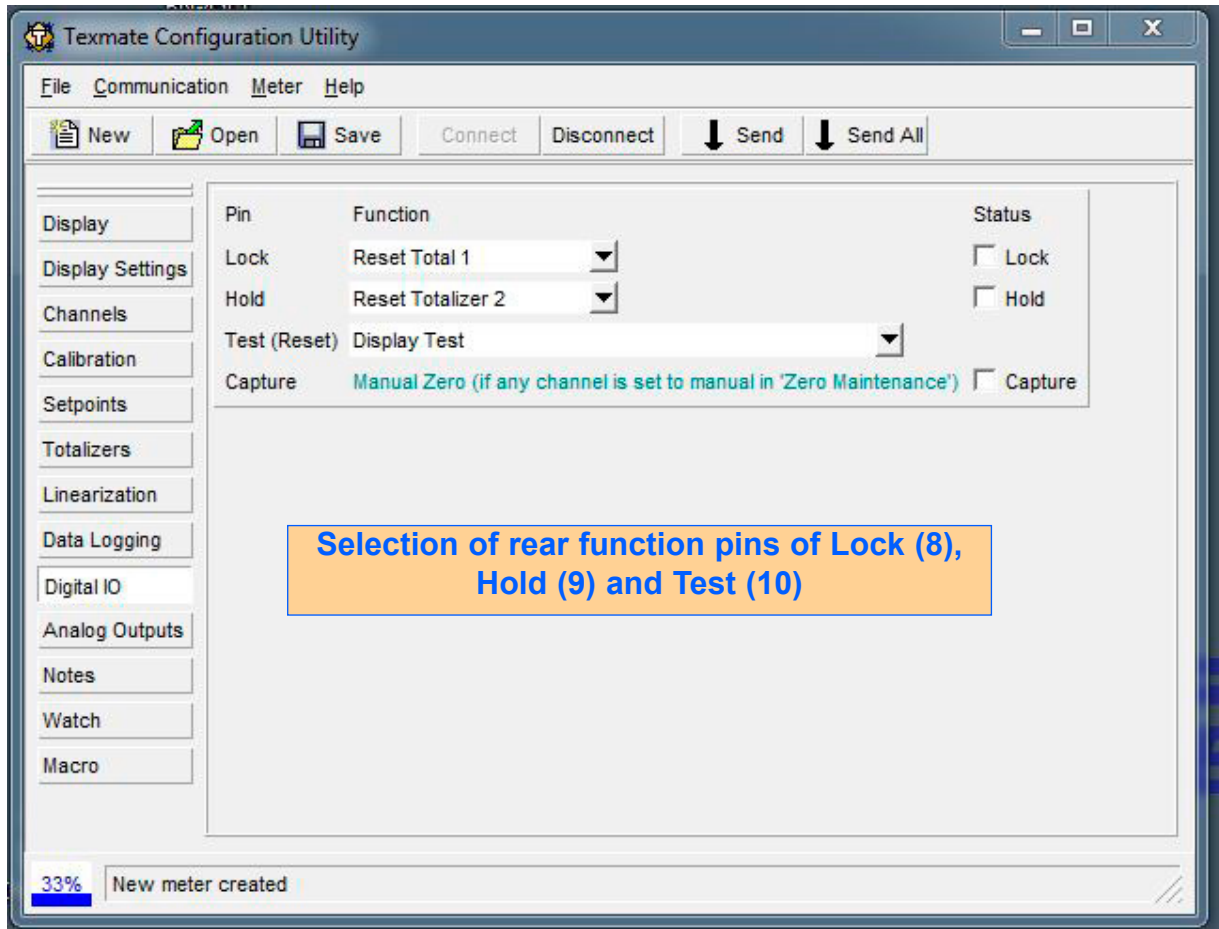
Available escape codes: \a, \b, \f, \n, \r, \t, \v, or \OxHH where H is a hexadecimal digit.

Text buffer will only show up to 64KB of data.

Save log data as it is sent from the meter on the Read Log.

For data logging functions and triggers, please refer to Serial Communications Supplement (NZ202) Pages 18-21

[https://www.texmate.com/media/pdf/2019/05/SerialComm\\_NZ202.pdf](https://www.texmate.com/media/pdf/2019/05/SerialComm_NZ202.pdf)

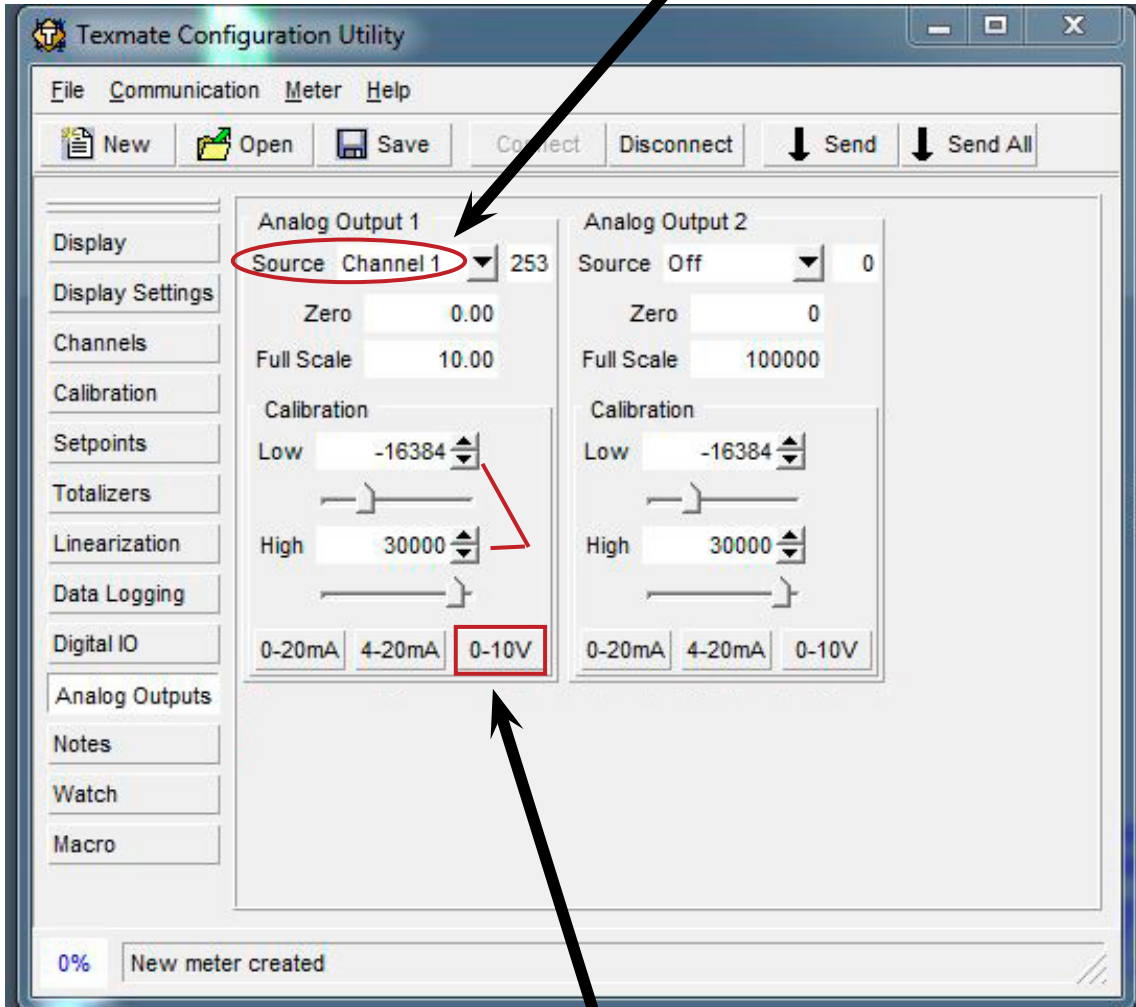




Min and Max range setting  
for analog output.  
e.g. 0V = 0.00  
10V = 10.00

**Analog Outputs Calibration Steps:**

1. From the Source field, select the respective channel in use, then enter Zero and Full-Scale values.



2. Connect the meter's input channel from a signal generator.

3. Connect the meter's output (terminal 16 (+) and 17 (-) to a multimeter

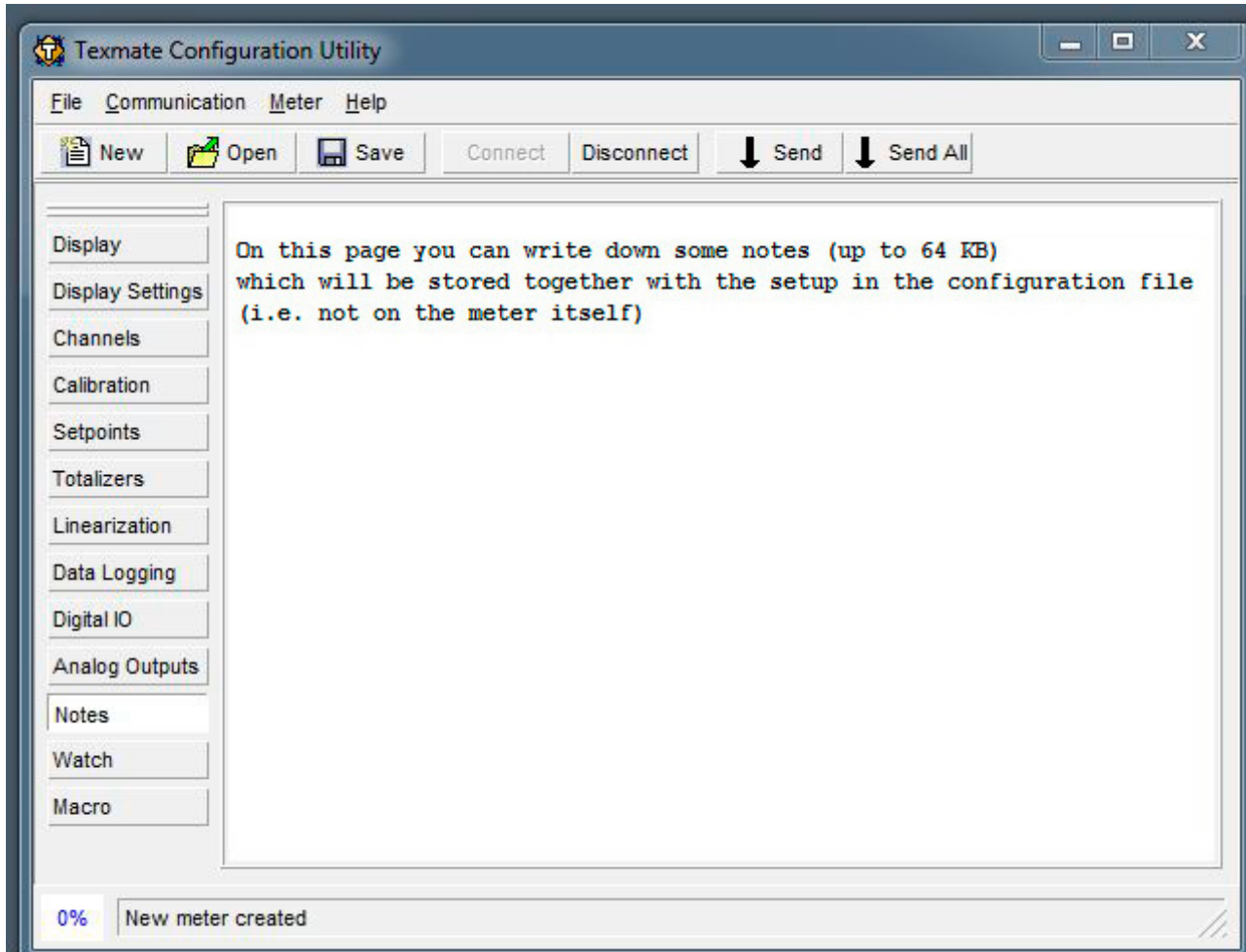
4. Press the respective calibration button (e.g. 0-10V) to obtain the auto-generated analog output values.

5. Feed a low input signal to the meter, (e.g. 0V) and check the multimeter's reading. It should be very close to 0.000

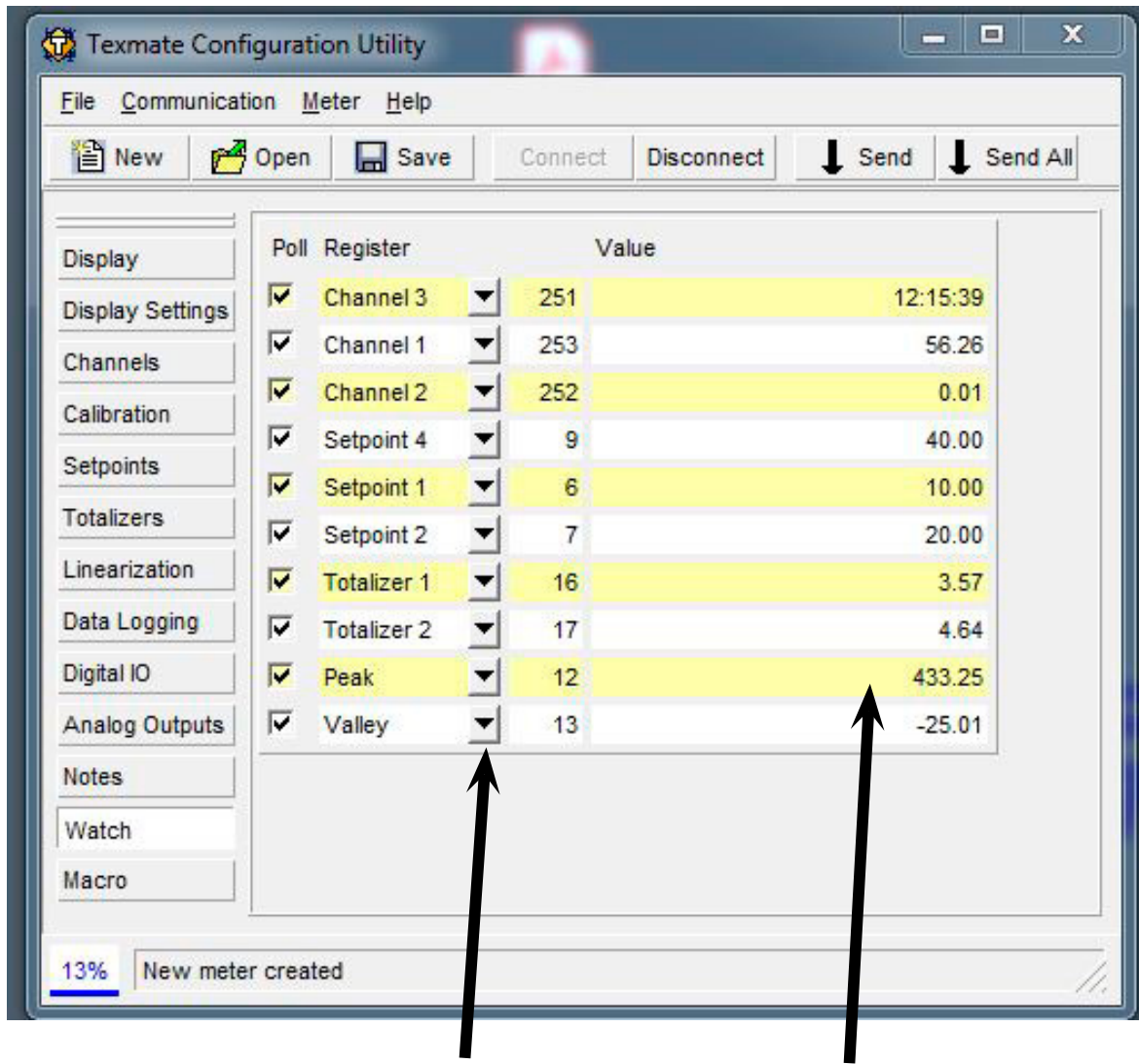
6. Use the up-down arrow (or slider) to fine-tune the value displayed on your multimeter.

7. Repeat the same process for input signal High (e.g. 10V) and check the multimeter's reading. It should be very close to 10.000

Notes



Watch

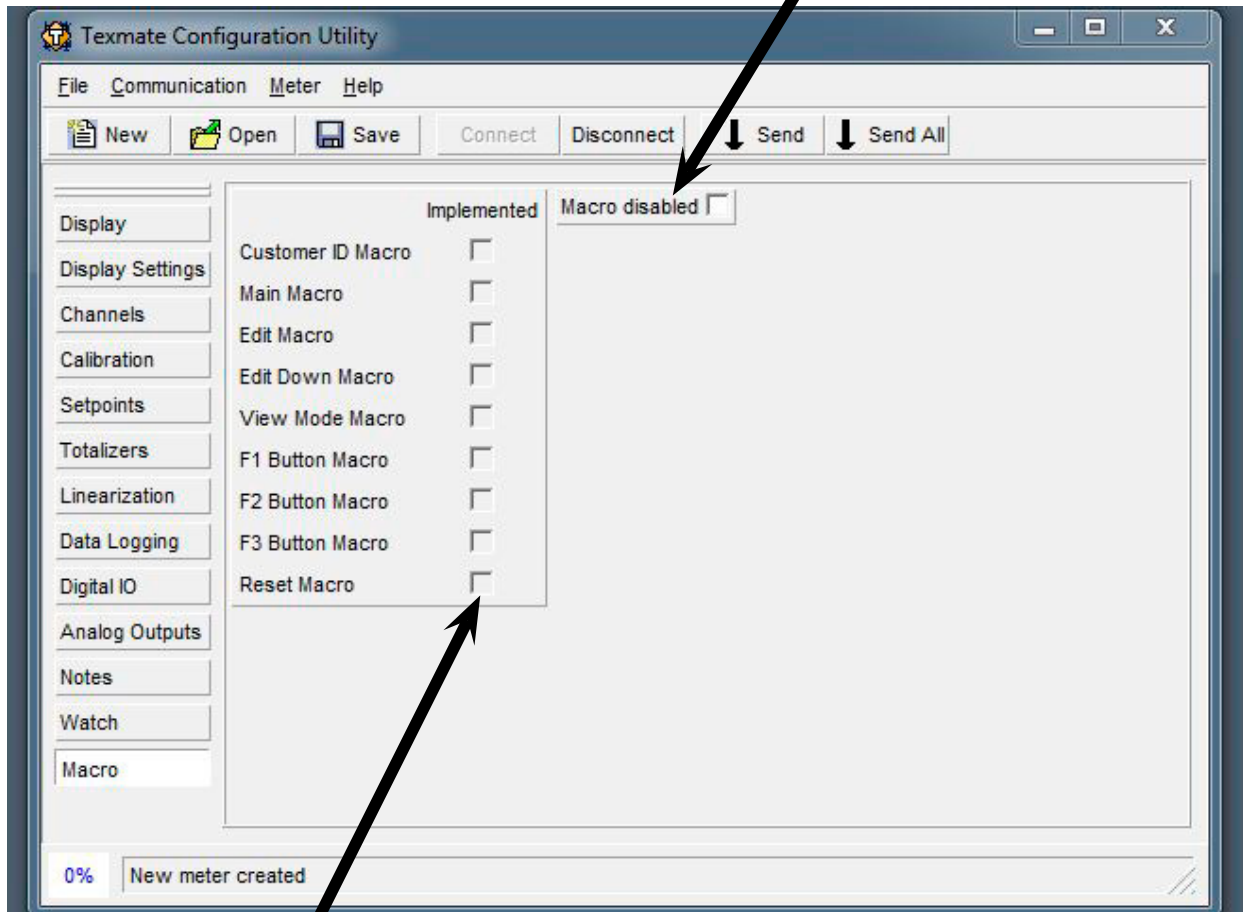


Dropdown menus can be changed to desired register.

The Watch menu lets you observe the values displayed by the meter in real time.

Macro

Starts and stops macro execution.



Indicates which types of macros have been installed.