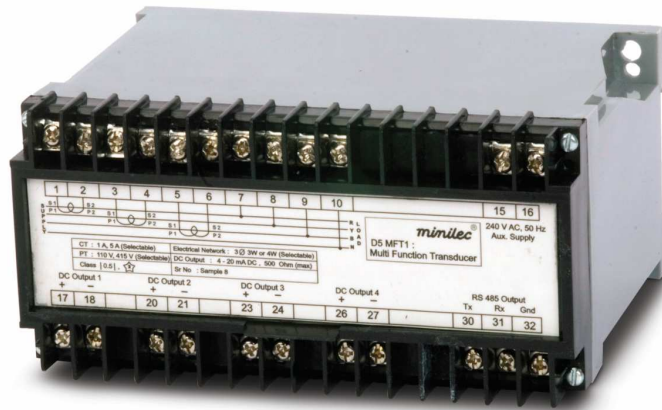


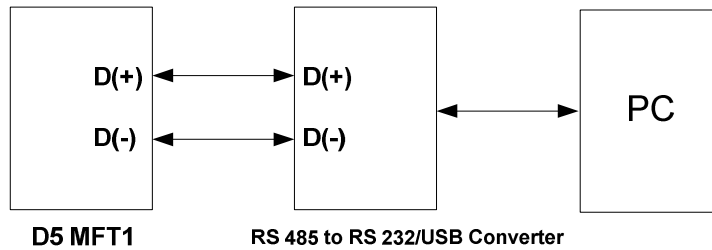
D5 MFT1 Programming Guide



Step 1) First Connect D5 MFT1 to Computer. The connections are mentioned below.

RS 485 Communication Connections :

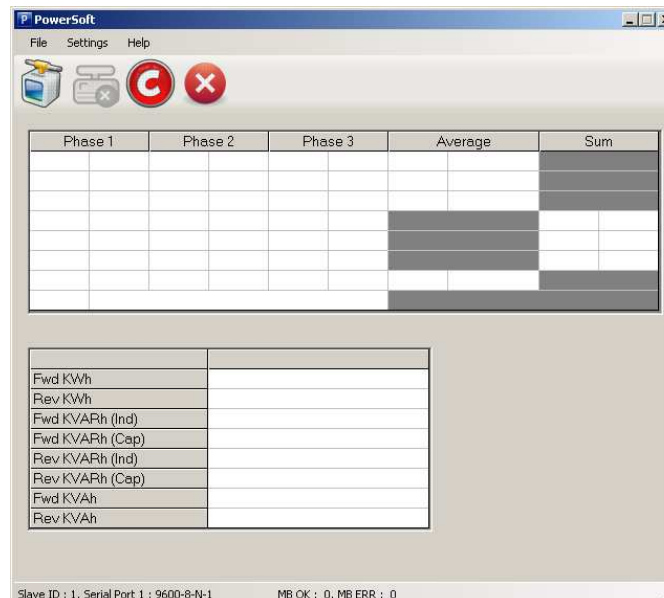
RS 485 Half Duplex Connections D(+) and D(-) are provided on the Transducer. Ensure that following connection scheme is followed.



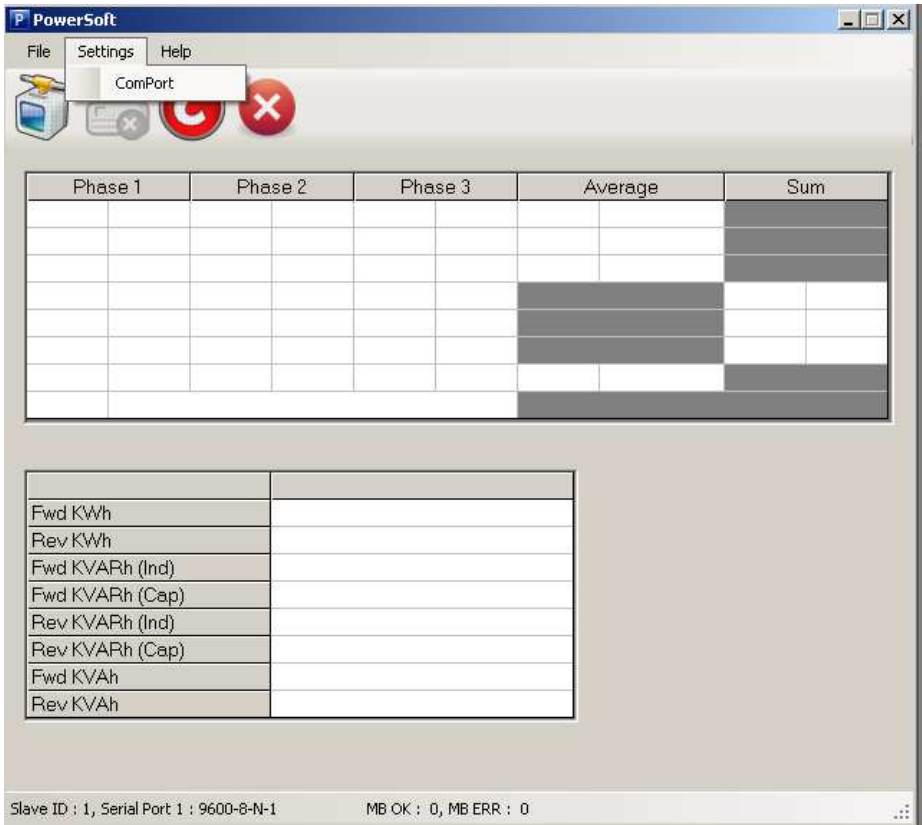
Step 2) Copy the PowerSoft Application Software from CD to your Laptop or Desktop Computer.
Note : The application will work with Windows Operating System Windows XP or less.

Step 3) Double Click on the PowerSoft Application Icon. Please make sure that Transducer and Converter are powered on.

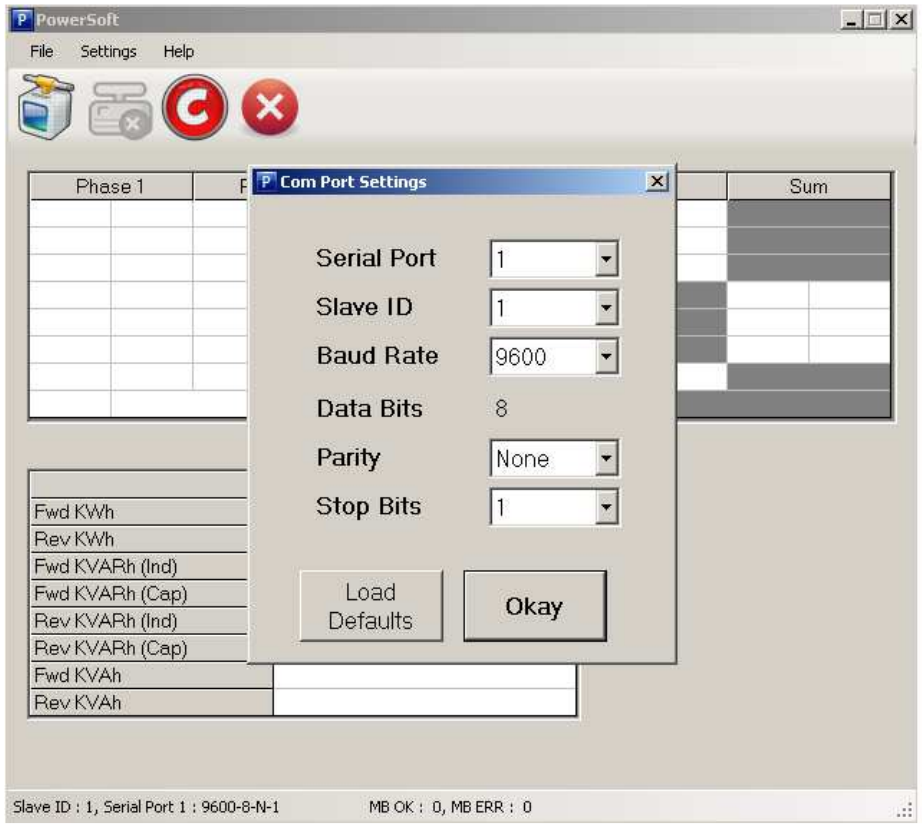
Step 4) You will see the screen as under.



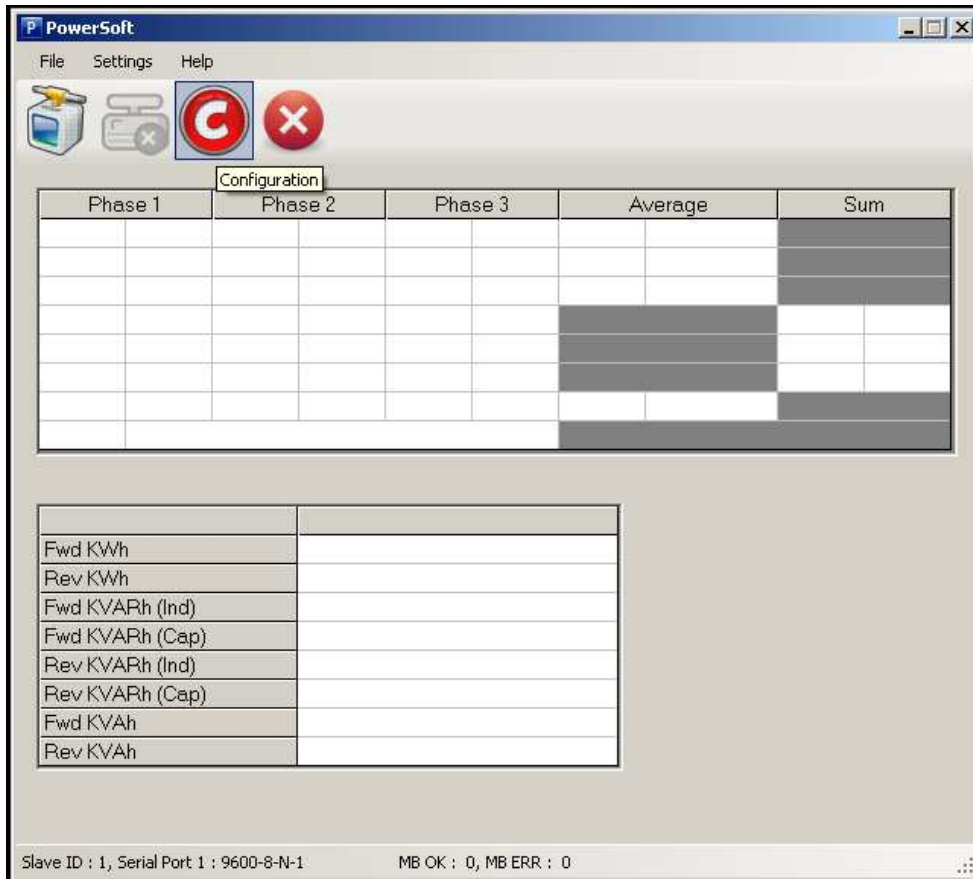
Step 5) Click on ComPort under Settings Tab.



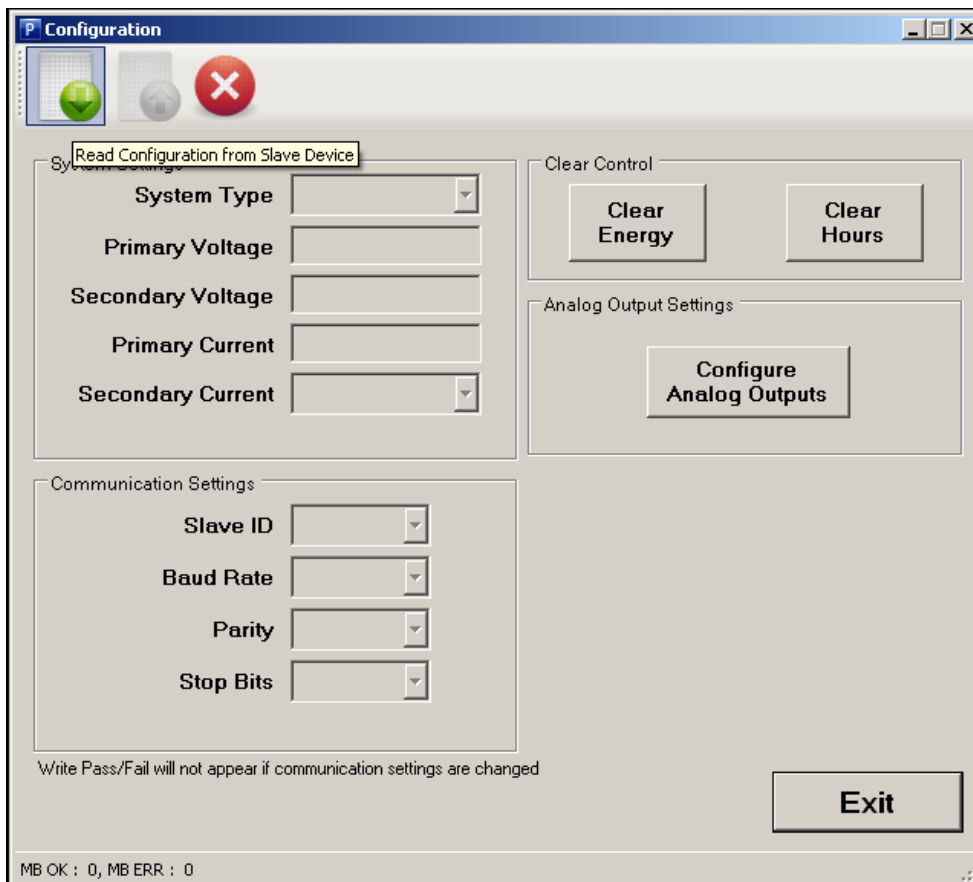
Step 6) Please select the options as under. **All MFTs are assigned address (ID) as 1 at the time of shipment.** The Serial Port Address is same as the COM Port Address. Please check the existing Com Port Address using Windows Device Manager. Please note that for USB – RS 485 Converter, it is listed as Bridge.



Step 7) Now read configuration from the MFT to further change any settings if required. Go to Configuration icon marked as C and click on it.



Step 8) Click on the Green Down icon as shown below.



Step 9) This will read the existing Transducer configuration.

The screenshot shows a 'Configuration' window with the following sections:

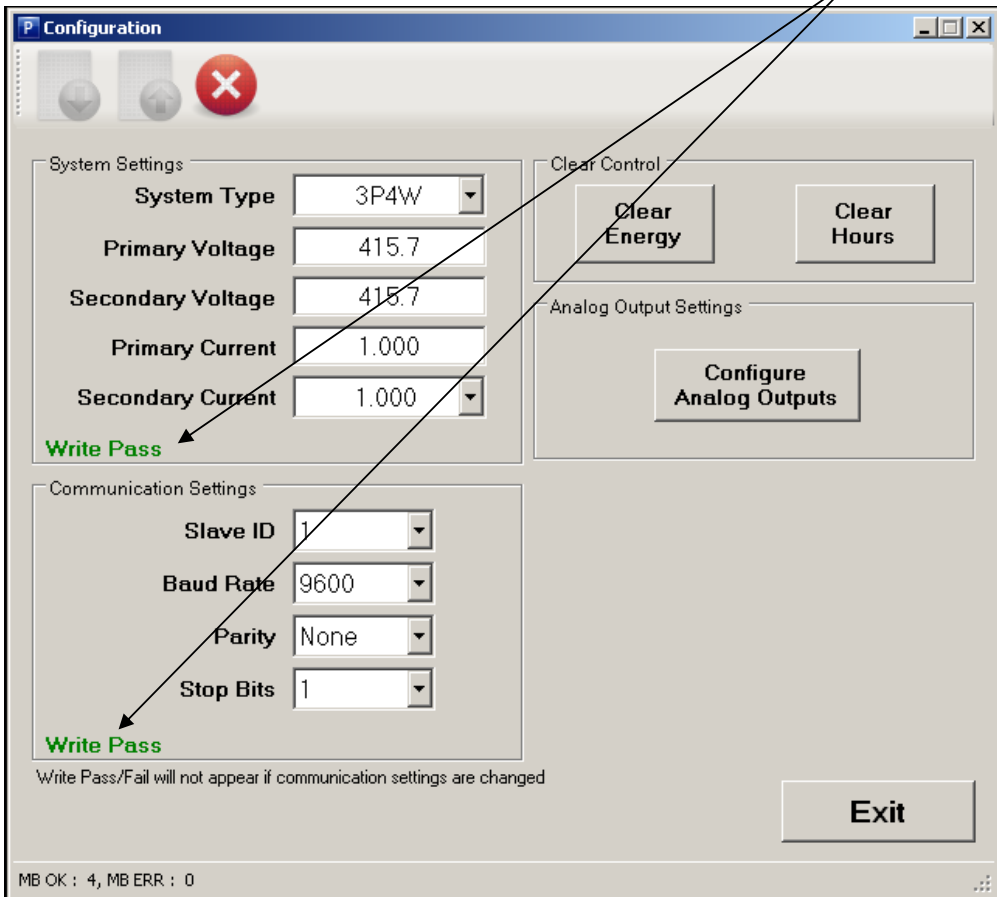
- System Settings:** System Type (3P4W), Primary Voltage (415.7), Secondary Voltage (415.7), Primary Current (1.000), Secondary Current (1.000).
- Communication Settings:** Slave ID (1), Baud Rate (9600), Parity (None), Stop Bits (1).
- Clear Control:** Clear Energy, Clear Hours.
- Analog Output Settings:** Configure Analog Outputs.
- Exit:** Exit button.
- Status:** MB OK : 2, MB ERR : 0.

At the top left, there are three icons: a grey arrow pointing down, a green arrow pointing up, and a red circle with a white 'X'.

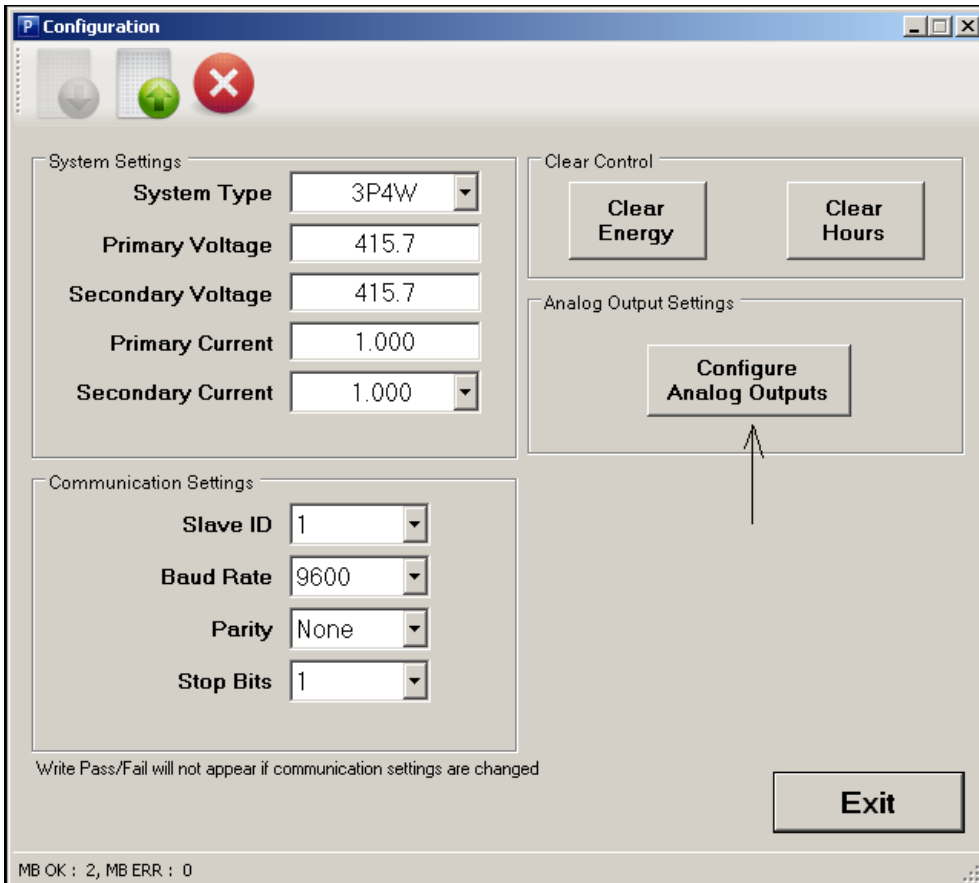
Step 10) Now System Settings like System Type 3 Phase 4 Wire or 3 Wire, PT Ratio, CT Ratio, Device ID and Baud Rate can be changed in this screen. Please note that Primary Voltage or Current Rating are to be entered in units place e.g. 11KV = 11000, 220KV = 220000 etc. Once the changes are done . Click on the icon as shown.

This screenshot is identical to the previous one, but with a tooltip over the green arrow icon at the top left. The tooltip text is: "Write Configuration to Slave Device".

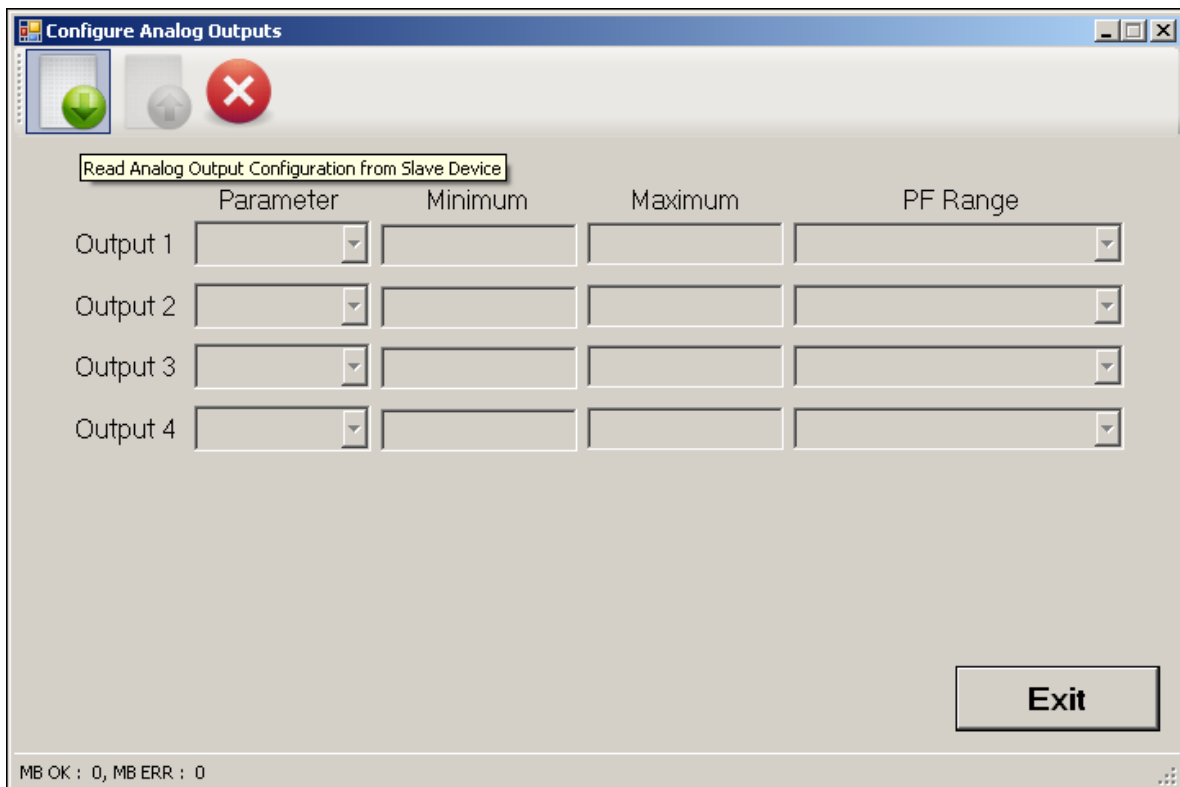
Step 11) If the settings are successfully uploaded, the below message will be displayed.



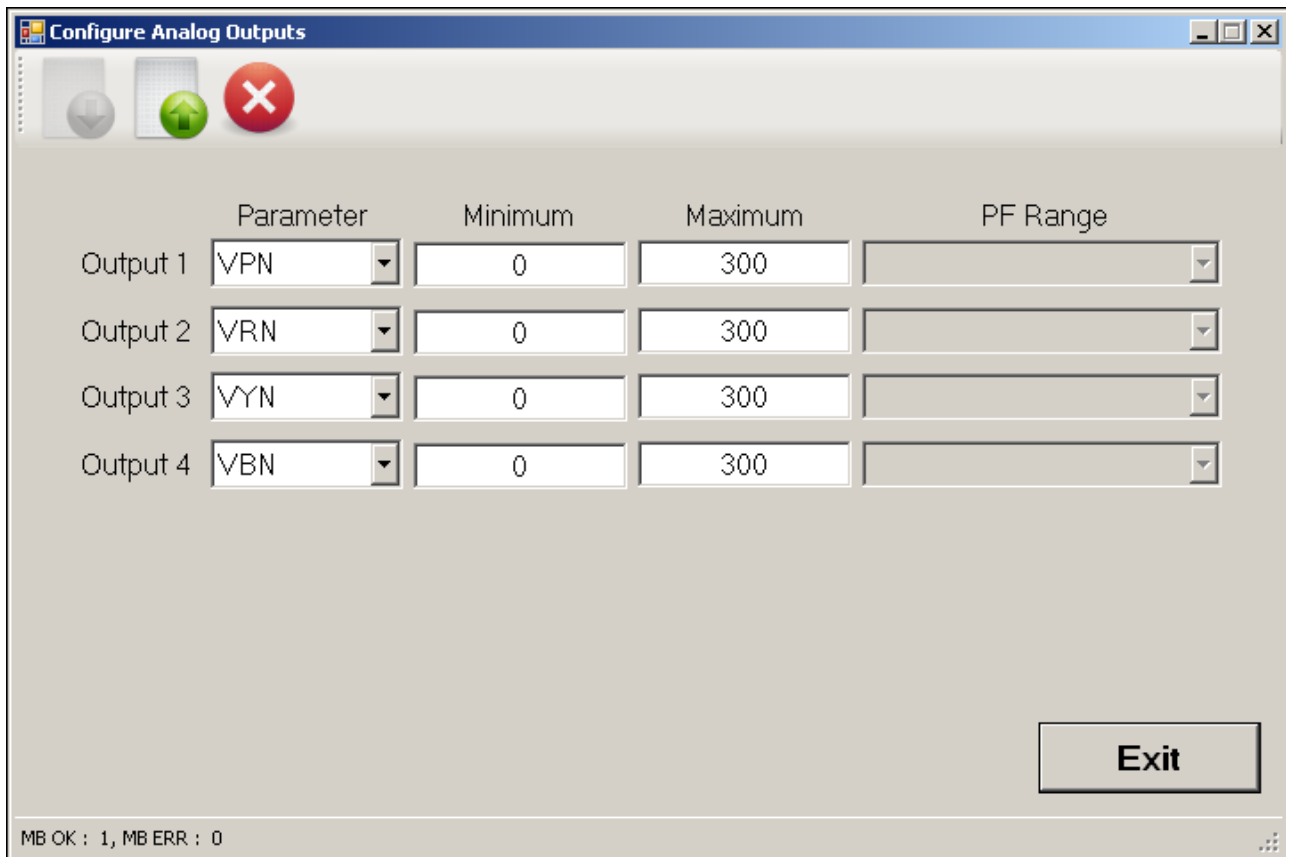
Step 12) To configure Analog Outputs, click on the tab as shown below.



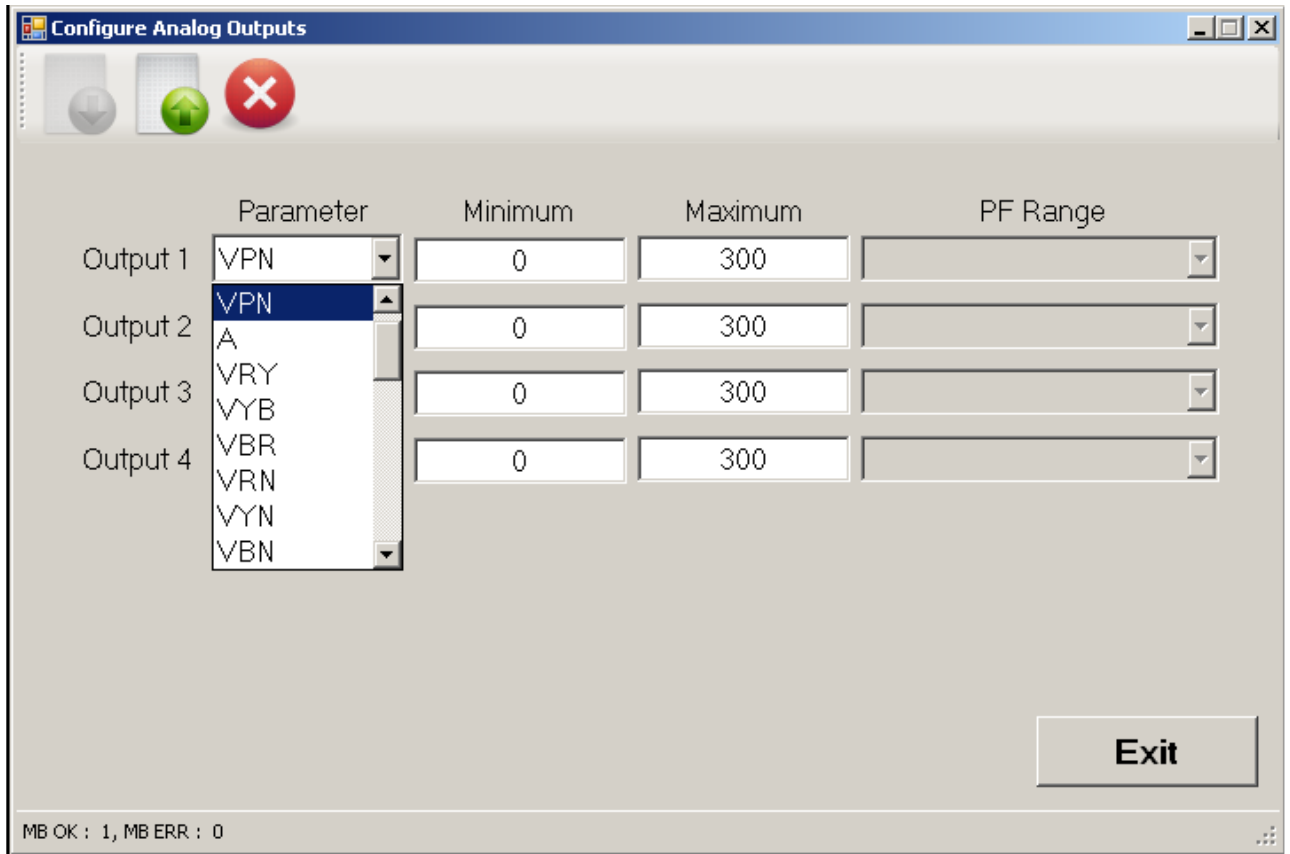
Step 13) It will show the following window. Click on Down Green icon to read current configuration.



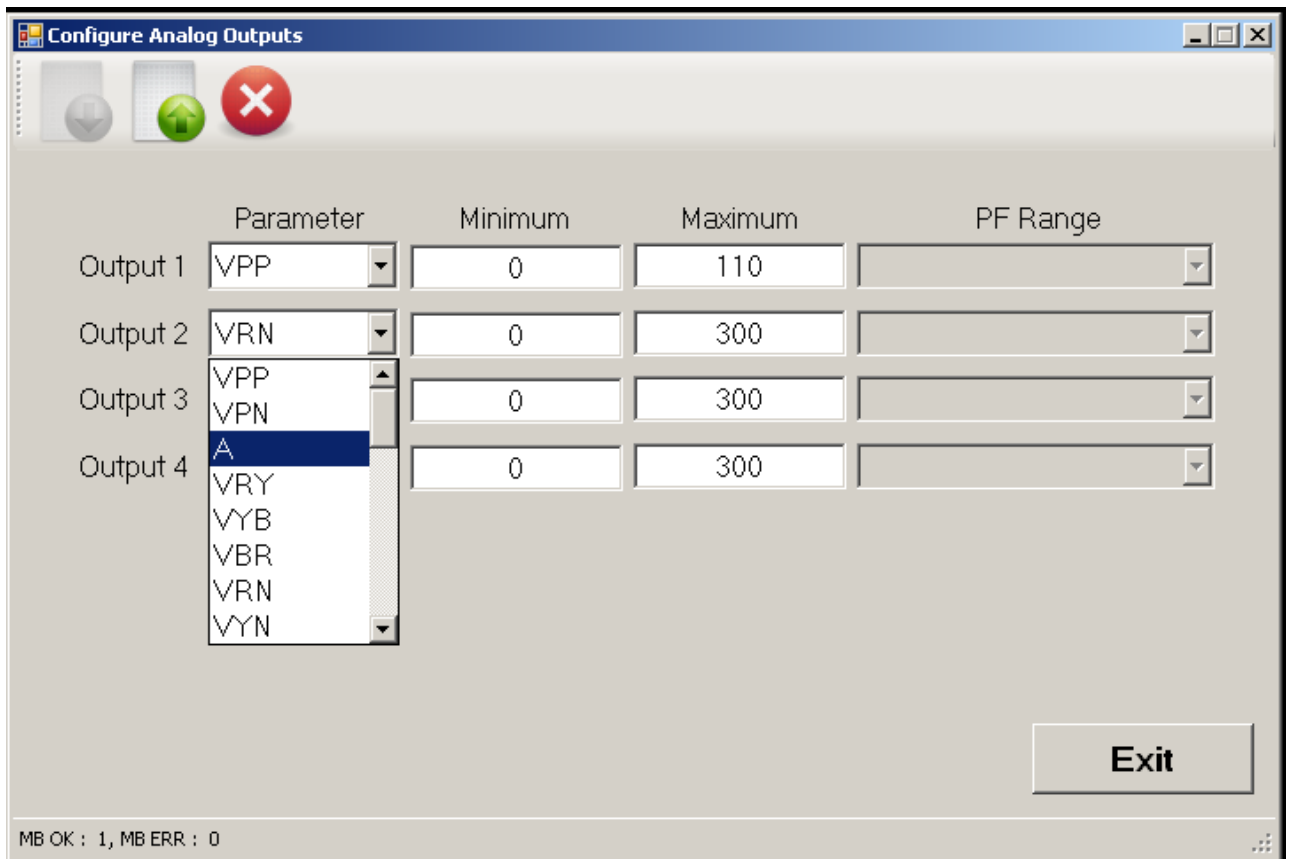
Step 14) The existing Output Configuration will be displayed in the Window.



Step 15) You can select the Parameter per Output and define its minimum (4 mA) and maximum range (20 mA)



Step 16) Similar Steps needs to be followed for other outputs.



Step 17) Third Output

Configure Analog Outputs

	Parameter	Minimum	Maximum	PF Range
Output 1	VPP	0	110	
Output 2	A	0	1	
Output 3	VYN	0	300	
Output 4	VYN VBN IR IY IB WATT VAR VA	0	300	

Exit

MB OK : 1, MB ERR : 0

Step 18) Fourth Output

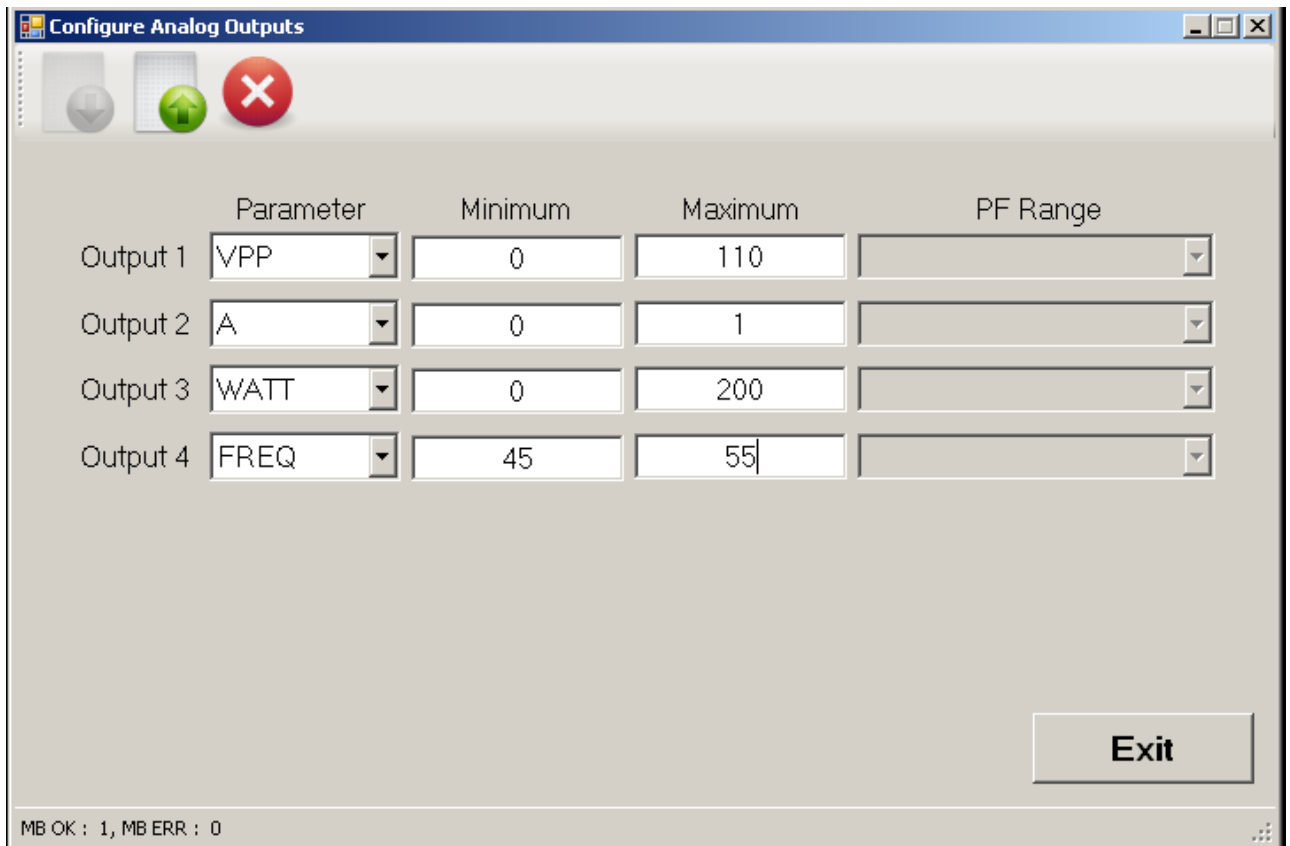
Configure Analog Outputs

	Parameter	Minimum	Maximum	PF Range
Output 1	VPP	0	110	
Output 2	A	0	1	
Output 3	WATT	0	200	
Output 4	VBN VBN IR IY IB WATT VAR VA WATT R	0	300	

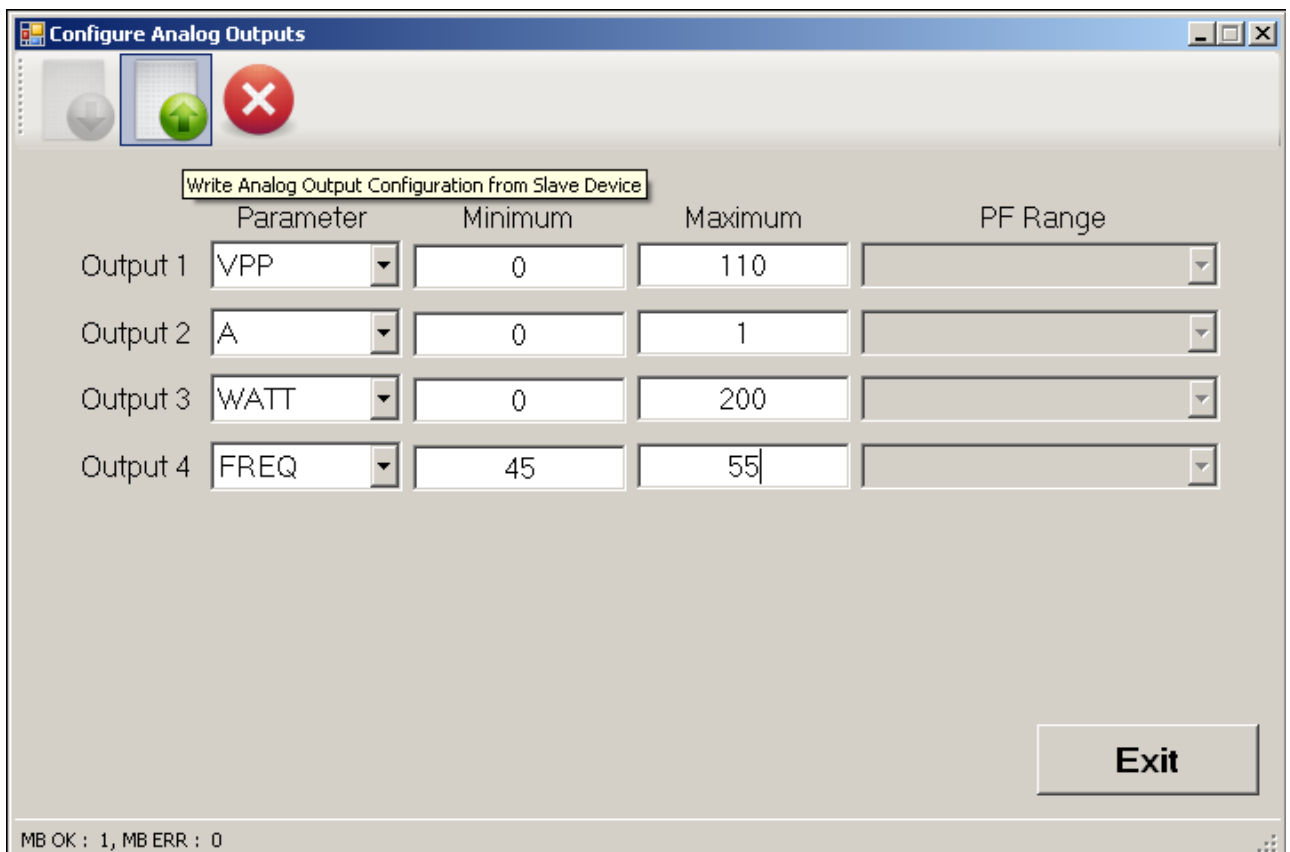
Exit

MB OK : 1, MB ERR : 0

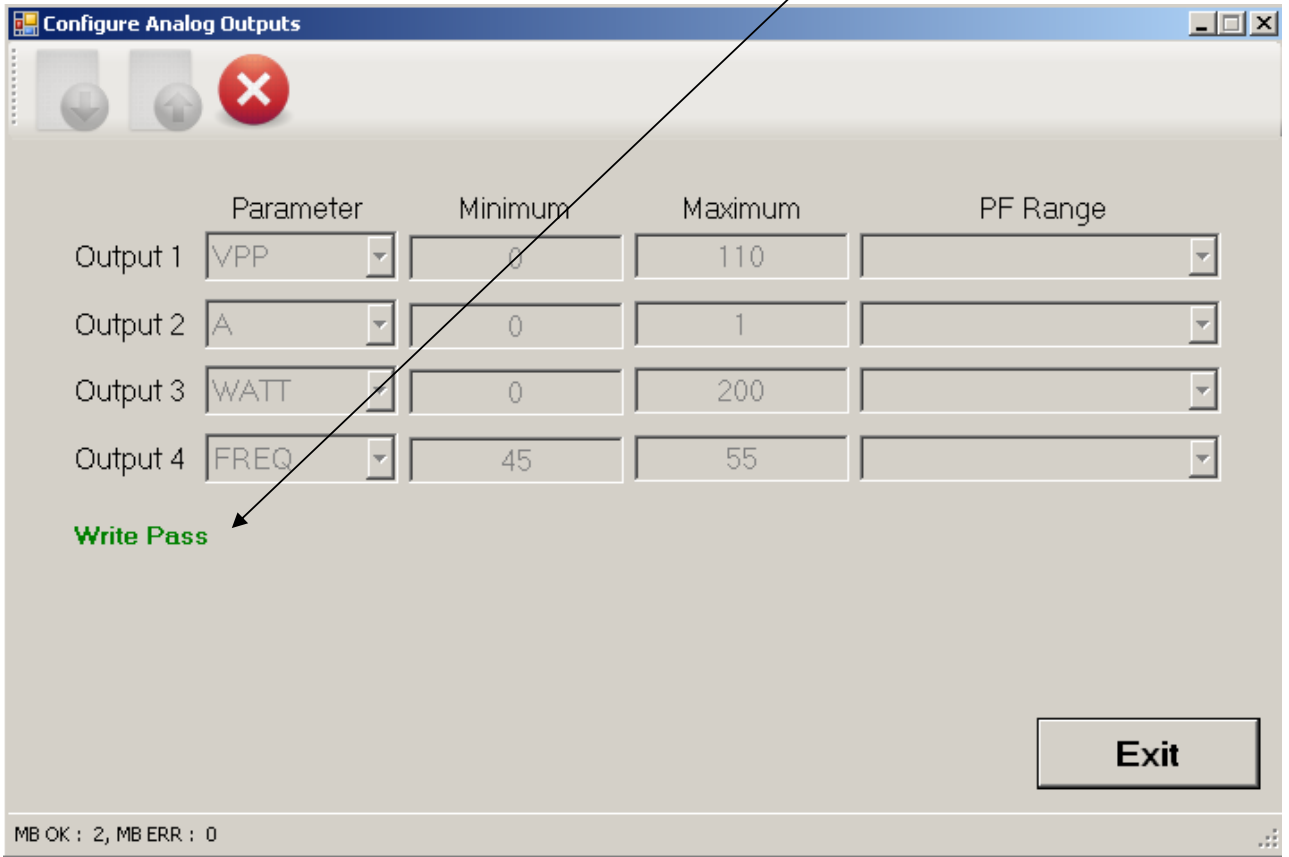
Step 19) Now all the outputs are redefined.



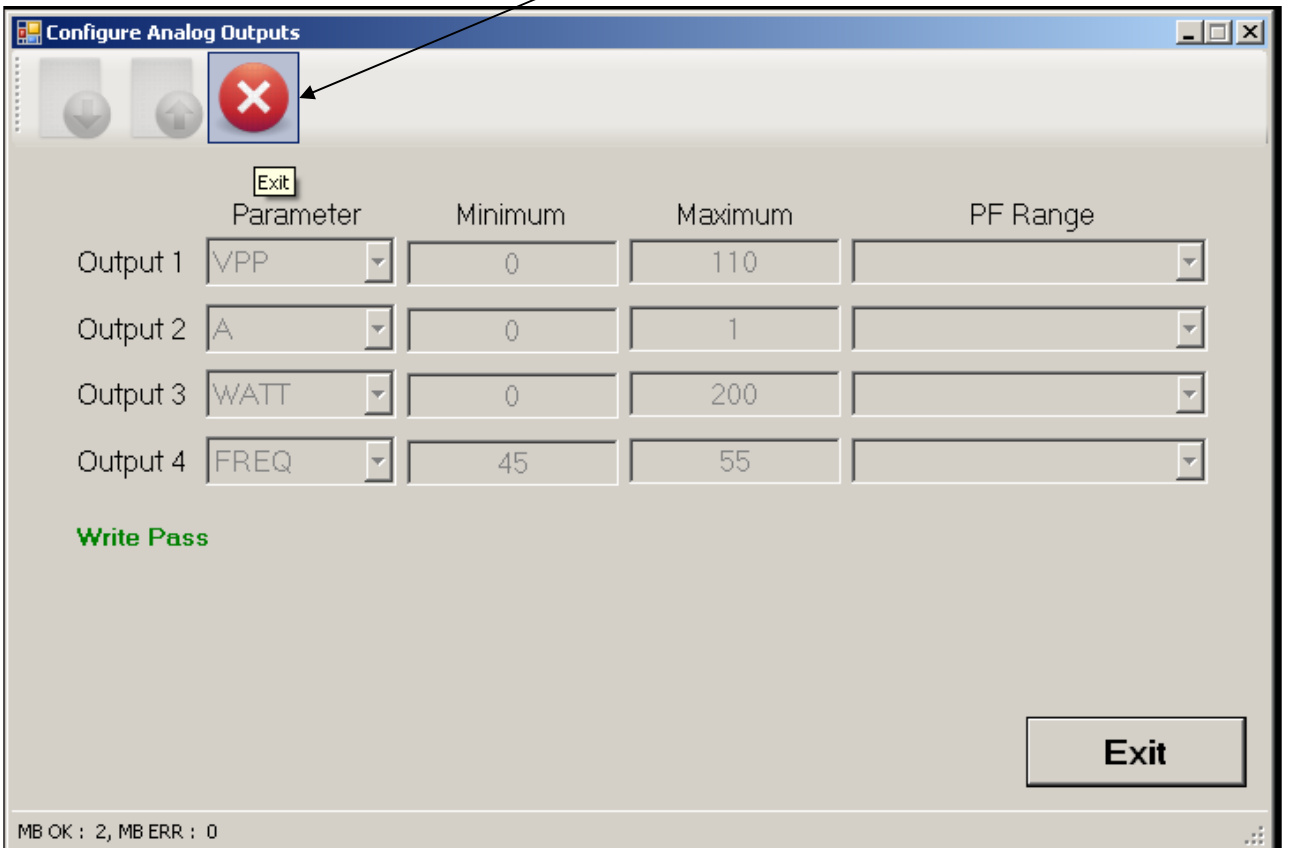
Step 20) Now we need to upload this new configuration to the Transducer. Click on the icon as shown below.



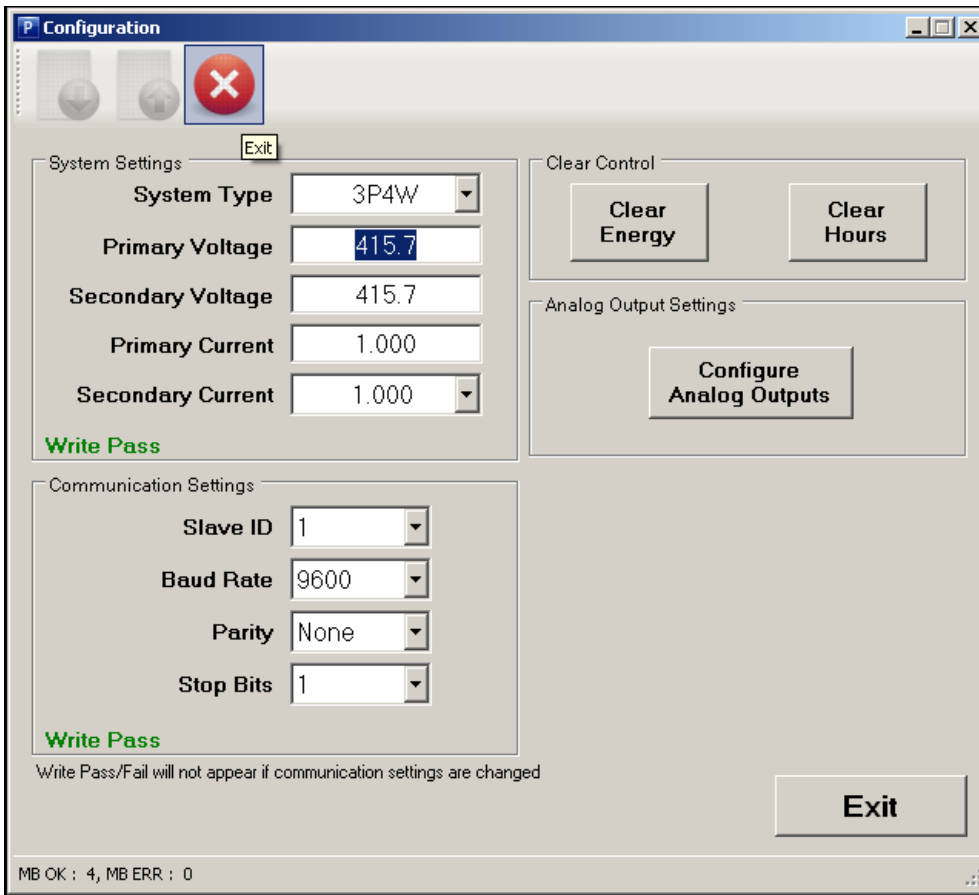
Step 21) If the settings are successfully uploaded, the below message will be displayed.



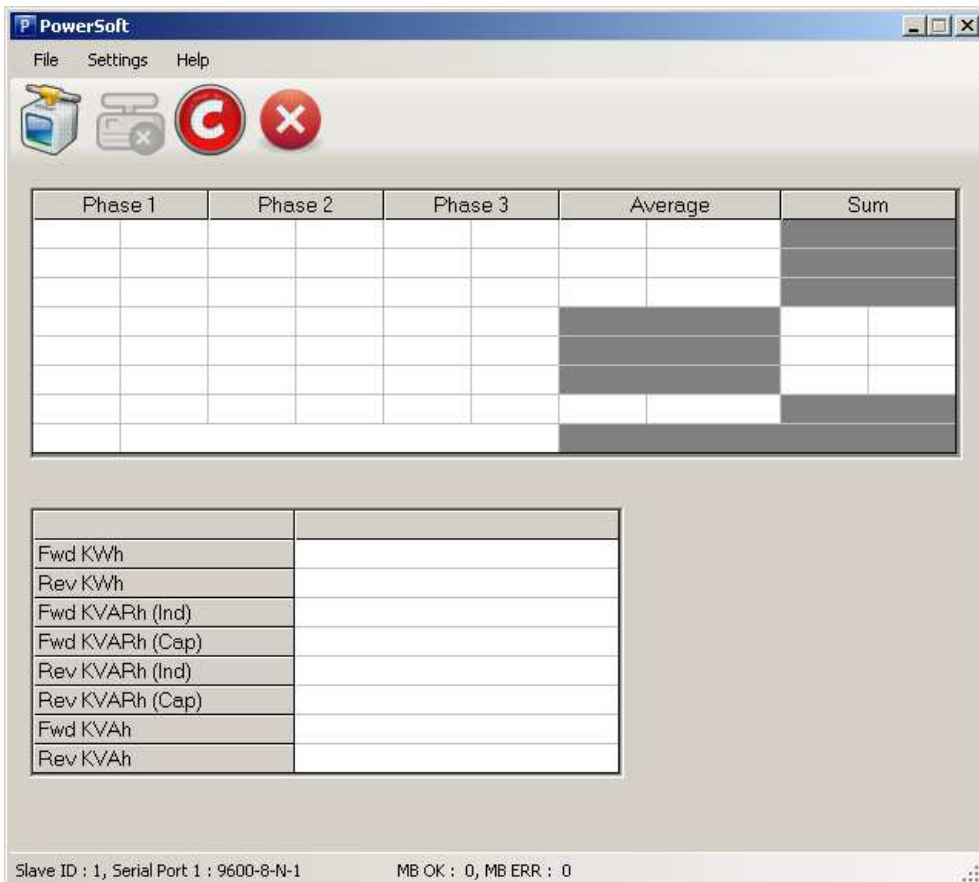
Step 22) Click on Exit to return to previous mode.



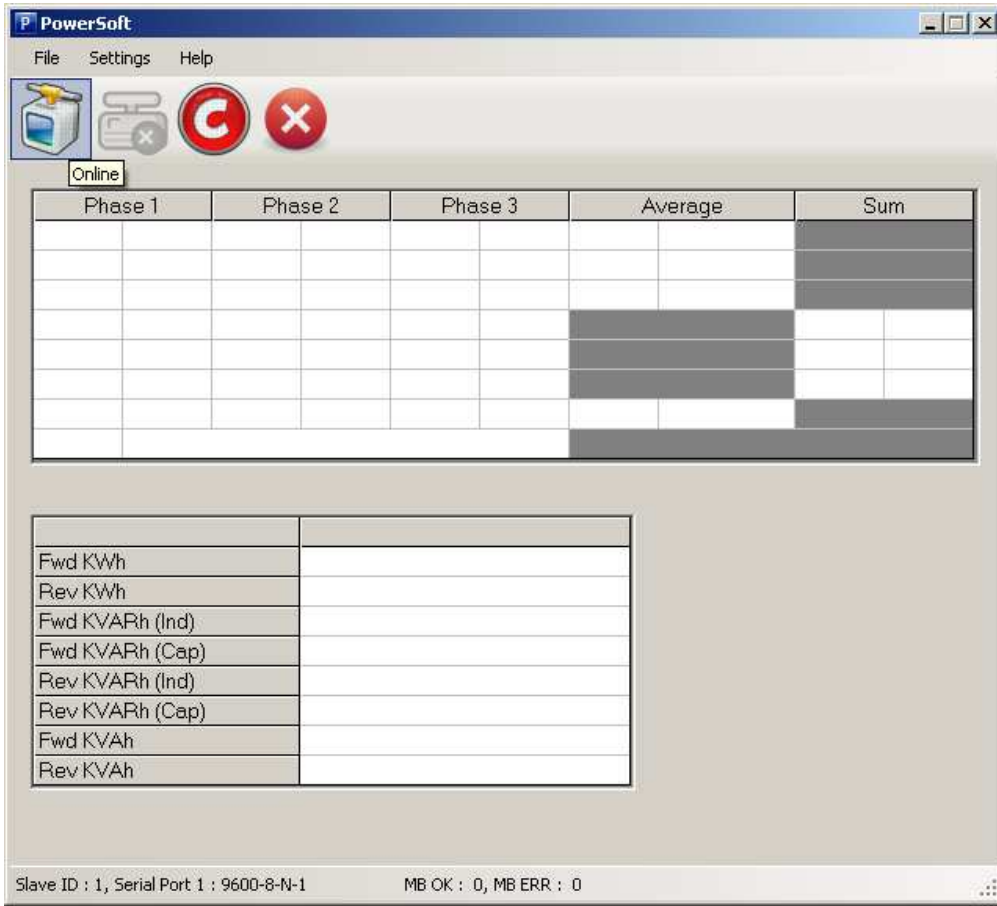
Step 23) Now Click on Exit to exit from Configuration.



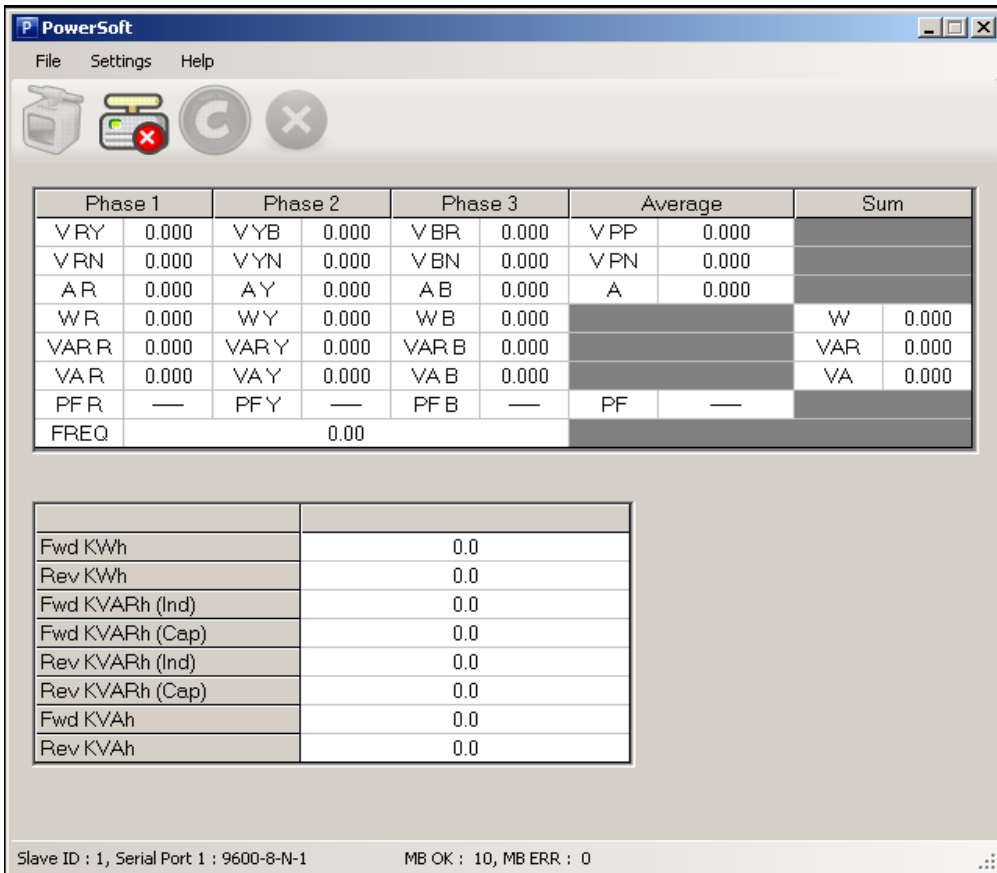
Step 24) You will return to Home Screen.



Step 25) If you wish to see real time data using this Software, click on Online icon as shown below.
 This application can be used to see real time data of only one Transducer.



Step 26) The readings will be displayed in the below format.



Step 27) Click on Offline icon to exit from the real time data mode.

PowerSoft

File Settings Help

Offline

Phase 1		Phase 2		Phase 3		Average		Sum	
VRY	0.000	VYB	0.000	VBR	0.000	VPP	0.000		
VRN	0.000	VYN	0.000	VBN	0.000	VPN	0.000		
AR	0.000	AY	0.000	AB	0.000	A	0.000		
WR	0.000	WY	0.000	WB	0.000			W	0.000
VAR R	0.000	VARY	0.000	VAR B	0.000			VAR	0.000
VAR	0.000	VAY	0.000	VAB	0.000			VA	0.000
PFR	—	PFY	—	PF B	—	PF	—		
FREQ	0.00								

Fwd KWh	0.0
Rev KWh	0.0
Fwd KVARh (Ind)	0.0
Fwd KVARh (Cap)	0.0
Rev KVARh (Ind)	0.0
Rev KVARh (Cap)	0.0
Fwd KVAh	0.0
Rev KVAh	0.0

Slave ID : 1, Serial Port 1 : 9600-8-N-1 MB OK : 113, MB ERR : 0

Step 28) Click on Exit to close the application.

PowerSoft

File Settings Help

Exit

Phase 1	Phase 2	Phase 3	Average	Sum

Fwd KWh	
Rev KWh	
Fwd KVARh (Ind)	
Fwd KVARh (Cap)	
Rev KVARh (Ind)	
Rev KVARh (Cap)	
Fwd KVAh	
Rev KVAh	

Slave ID : 1, Serial Port 1 : 9600-8-N-1 MB OK : 0, MB ERR : 0