LOG MASTER USER INSTRUCTIONS

Congratulations for purchasing our powerful data-logger system LOG MASTER.

Software installation:

Connecting your device to your PC:

LOG MASTER has two main parts and three user options

- 1.) Temperature Logger
- 2.) Power logger
- 3.) Handheld Tachometer with IR thermometer (Optional)
- 4.) PWM Module (optional)
- 5.) Frequency Measuring Module (Optional)

Connecting the Logger Units to PC:

Your product comes with a USB storage device that contains the software installation files. In "LOG MASTER INSTALLER" folder please run the SETUP file and install the software to the right location you need it to be installed. After install the APP software in your PC, turn on the Power Logger by connecting it to the mains power by using the power cord provided with the unit and connect the Temperature Logger using the USB A to B cable by plugging in the USB-B side to it and the USB-A side to the PC or to any USB power supply.

After power up the units it needs to pair with the PC by using Bluetooth link or by the USB port based on the connection you have selected to connect the device to PC. Bluetooth names for these two devices are "LOG_MASTER WATT METER" and "LOGMASTER_TEMPERATURE". During the registration you may need to input the pairing code 1234 for both devices. After the units being paired go Windows Device Manager and find the COM port for the connections. If the Temperature Logger is being connected to the PC by using the USB cable then the PC will detect this device as a cable connected device, not as a Bluetooth device. So you may need to search for the USB cable connected device COM port in Device Manager if it is cable connected.

There is no pairing needed for the Handheld Tachometer with IR Thermometer as it works by the link created via RF through the Temperature Logger. However the PWM Module need to connect to the PC through the USB A to B cable and has to find the COM port number at Device Manager and select when you run the application software.

After connecting the units with PC find the desktop icon for the LOGMASTER as shown below and double click on it.



Then the following window will be displayed and start searching for the Temperature Logger.



Fig.1 Main Display Window

If the port settings are incorrect then the following window will be display.

Hardware COM Port Settings Temperature Module _{Status} COM4 Scan	Hardware COM Port Settings Temperature Module _{Status} %COM4 Scan
No Temperature Measurement HW detected !	Powr 後CC No Power Measurement HW detected ! 通
PWM Module Status	PWM Module Status

- Fig. 2: For Temperature Logger
- Fig. 3: For Power Logger

If the ports settings are correct then the device will be found and will switch to next device. PWM module is optional so it will not be automatically searched and you may need to activate scanning the device if you have one by pressing the scan button under PWM Module.

Once the device registration being completed above registration window will be switched off and will move to the main display window similar to Fig. 1 last page

Power logger only can be connect to PC via Bluetooth connection

Now you are ready to run your setup and start recording data.

The LCD display on the Power Logger will give you a real time reference of the data such as V_{rms}, I_{rms},P_{true}, min and max Voltage and Current readouts, Power Factor and the AC frequency. If your unit comes with optional functions such as 4 channel Pressure measuring the pressure data will be seen on the PC window only.

Temperature Logger can be 8 channels, 16 channels, 24 channels or 32 channels. Depend on your purchase. All temperature data will be displayed on the PC window and the data will be recorded into data files.

Turning on the data logging:

Once all the connections being done and the device registration on APP is successful simple turn on the switch of the display window by sliding it to the right hand side.



Fig. 4 Display Turn On/Off

Now the display will start showing the data in graphs with multicolor lines as you selected. Full range of selection is shown in the page 5. You may select the required graphs by ticking each box you desired to display during your testing.



Fig. 5: Full range of display graph selection

Below the graph selection window there is quick selection options for graph selection (See Fig. 6).

You can select all graphs, clear all current selections or create a selection file by using these quick menu buttons.



Fig. 6: Quick Selection Button

Data Update Rate Selection:

You can select the data update rate by ticking the value as shown below. Update rate can be selected between 50mS up to 1min.



Fig. 7: Data update Rate selection

Graph Legend:

On the display window top right corner you can find the Graph Legend buttons. Press the second button will give the popup window that shows different selections that you ma Press the second button will give the popup window that shows different selections that you ma Press the second button will give the popup window that shows different selections that you may want to see the graph. Can zoom the display by using the quick selection buttons in this popup window. You also can pan the display by using the pan button.



Fig. 8: Graph Legend

Saving you job into a TDMS file:

To save your work first you have to set a file path and a file name. You can select your path and input a file name where you want to save your test data. As shown in Fig. 9 in your application window bottom right corner you can see a location wit "File Path & Name". Select your file folder you want to save the file by clicking on folder button and select the folder and input a file name to save your file.



Fig. 9: File Path & name



Fig. 10: Saving your job

Just below the Graph Legend you can find a "SAVE" Button that helps you to save your current test into a TDMS file which you input in the file path window. Simply press the button and the data will start saving into a file and the Red light next to save button will become green to show the saving of the data is on process. To stop saving the data press the Save button once again and the Green light will become Red.

Playback saved files:



Fig. 11 Play, Stop, Fast Forward

To playback a saved file, first you have to select the path and the file name at the "File Path & Name" window as shown in Fig. 9. Then press the play button as shown above in Fig. 11. To stop the playing simply press the Stop button. If While you are playing a saved file if you need to scroll through faster you can press the fast forward button. You can select X1, X10, X100, X1000, X10000 multiple speeds by pressing the Fast Forward button more times. While the playing is stopped press play once again will run the file from where you stop.

Selecting Relative and Absolute Time:



Fig. 12 Time Setting

As shown in Fig 12 above you can select the Relative time (starts from 0:00:00) or the Absolute time (Real clock time of your PC) by pressing "Relative/Absolute" Button. You can also pause your testing by pressing the "Pause" If you would like to restart the test then you can reset the display graph window by pressing the "Reset" button.

Current Data Values and Max Values Display:

	Descri	Value	Max
Voltage (v)		0.00	0.00
Current (A)		0.00	0.00
Power (w)		0.00	0.00
Speed (RPM)		0.00	0.00
IR Temp(c)		0.00	0.00
Pressure 1		0.00	0.00
Pressure 2		0.00	0.00
Pressure 3		0.00	0.00

Fig. 13 Current Value/Max Value Display

Bottom Mid part of the display window you can find the current Value display at this moment and the Max value display up to this moment from the starting point. Pressing the "Quick Report" Button you can create a current moment display value and the max value data into an EXCEL file. Mid Part of the window shown in Fig. 13 shown above is the description of your test on each graph line. You can input your own description for each channel. If you want to clear all the descriptions you temporarily input above can be cleared by pressing the "Clear Description" button. Pressing "Clear Max" button will reset all the Max values. Synchronized data display for Voltage, Frequency, Current and Power:



Bottom right corner window of the main display window will show the synchronized data that you can see on the Power module LCD display.

Other special selections on Tool bar menus:



As in regular Windows applications user can set Page setup or print a current window or quit program in the File Menu

Port Settings:

If the hardware being removed or power interrupted during the operation you may need to set the ports setting once again.

TC Hardware setting:

In general TC hardware setting being done before the shipments. We recommend user to not to set these parameters

Hand held unit ID settings:

If you are using more than one set of equipments in closer environment there is an opportunity to have interferences.



the handheld unit with a 3bit Dip Switch under the battery door were you can select 000 to 111 (0 to 7 channels) by setting the dip switches. Default setting is 0. Once you change the dip switches you have to register the channel number by using above Handheld unit ID settings.