# DATA ACQUISITION SOFTWARE



Your purchase of this DATA ACQUISITION SOFTWARE marks a step forward for you into the field of precision measurement. Please read the following instructions carefully and always keep this manual within easy reach.

# **OPERATION MANUAL**

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#### **1. INTRODUCTION**

The SW-U801-WIN is a powerful WINDOWS program software which enables full line RS232 serial instruments to be with data logging function.

Three kinds of different displays provide you choice depends on your favorite. Maximum 8 channels monitoring at the same time let you can get a complete data information. High, Low warming to monitor any unusually situation. Sample rate setting from 2 to 3600 seconds to satisfy your different demands.

.xxx.mdb data file can be retrieved by EXCEL, ACESS.., and other kinds of database software. Data analyze and demonstrate easily.

# 2. GENERAL SPECIFICATIONS

System	Computer with following operating system :
Requirement	Win 98
	Win 2000
	ХР
	Monitor : VGA, EGA monitor
Common Port	Select COM 1 to COM 8.
Function	Data recorder, text display, analog display, chart
	display, high/low limit, data query, text report,
	chart report.
Data Record	Auto or Manual
Sample Rate	2 to 3,600 seconds.
Data Save	Data file : XXX.mdb.
	* Automatic save to disk.
	Data file : XXX.txt.
	* When execute the " Print data " function, will
	generate the xxx.text file.
Accessories	CD disk 1 PC.
Included	Operation manual 1 PC.

Optional	RS232 cable, Model : UPCB-01
Accessory	Direct RS232 cable be used to connect the meter
	to the computer ( COM port ).
	RS232 cable, Model : UPCB-02
	Isolated RS232 cable be used to connect the
	meter to the computer ( COM port ).
	USB cable, Model : USB-01
	USB interface cable be used to connect the meter
	to the computer ( USB port ).
	RS232 cable, Model : UPCB-04
	* UPCB-04 is the double D9 RS232 cable.
	* Available for FG-5000A-232, FG-20KG-232.

## **3. INSTALL AND START THE PROGRAM**

#### 3-1 Installation

# Before installation, please remove the previous version data acquisition software.

- 1. Start your windows.
- 2. Insert the CD-ROM disc into your CD-ROM driver.
- 3. In Windows 95 or 98, click Run from the Start menu.
- 4. Assume your CD-ROM driver is D:. Run "D:\setup.exe" and click OK to start install

#### 3-2 Star the program

Once you finish the installation, click the "Lutron801 " from the program file to start the program.

### 3-3 Cooperate with the right interface cable

Before you start the program, please identify and make sure to use the right interface cable (optional)

UPCB-01 UPCB-02 USB-01 UPCB-04

that connect the meter and between the computer. The cable information, please refer to page 10.

### 4. USING SW-U801-WIN

#### 4-1 System setup

After run the program & the computer will show the Fig. 1.

- 1. Chose System setup from the Setup menu in the top-left corner and you will see a dialog box as Fig. 2
- 2. Enter a value in the "System Scan Rate "grid to determine the sampling time.
- 3. Enter a value in the " Max Record Data " grid to determine computer's max. recording number.
- 4. Click the arrow of " Common Port " to chose which port you are connecting.
- 5. Click the arrow of "Text Display Type " to determine how many displays will show in the Text display screen.
- 6. Click the arrow of " Angular Display Type " to determine how many displays will show in the Angular display screen.
- 7 Click the up-down arrow of " Chart Display Chan. " to select which channel will show in the Chart display screen.
- 8 To determine the meter with how many display.
- 9 Click " Save " to save your above setting then click " Exit " to close this dialog box.

#### 4-2 Create New Data File

Chose " Create New Data File " from the " Setup menu ( Fig. 3 )

- 1. Enter a file name in the Data File Name grid.
- 2. Click on " Create " then click on " Exit " to close this dialog.
  - 5

#### 4-3 Angular Display

We recommend you start from the "Angular Display " for serial setting, and following instructions are based on the meter with 2 channels.

- Select " Angular Display " from the commander line of measurement system dialog box (Fig. 1), and you will see the Angular Display dialog box with four sheet. The initial screen 2 Angular Display depending on your selection of " System Setup " dialog box, Channel No. Please refer to the highlight blue number at the top-left corner of the angular panel.
- 2. Select " Page Setup " (Fig-4) sheet for the proper range setting of the angular panel and charts.
- 3. Select the up-down arrow of " Channel No " to determine which channel that you want to adjust.
- 4. Enter a number of the "Min Value" and the "Max Value" grid to determine the range of the angular panel.
- 5. Enter a number of the "Large Tick Delta " and " Small Tick Delta " grid to determine the graduation of the angular panel.
- 6. Enter a number of "Label Delta " grid to determine the numerical graduation of the angular panel.
- 7. Enter a number of " High Warning " and " Low Warning " grid to set the tolerable range.
- 8. Input a integer in " Decimal " grid to determine how many numbers behind the decimal point.
  - 6

- 9. The number of the "Scale" grid must be an integer, and the scale value will time your meter's reading value. For instance scale is 10 and the meter's reading value is 65.4. The reading value on the screen value would be 654.
- 10 To judge the unit of your measurement, please click the grid in front of " Unit Auto Sense ".
- 11 Press " Save " button to save the setting. *Press Save button every time to make new setting value work.*
- 12Change to sheet " Angular Display " (Fig-5) you can find the angular panel and inspect whether the setting is OK.

#### Panel Description

- \* Timer icon : Show the measuring time.
- \* Counter icon : Show how many data recorded.
- \* Scan Rate indicator : Show the sampling time.
- \* Run / Pause button :
   If it shows Run that means data record automatically.
   If it shows Pause that means data record stopping.
- \* Alarm Sound : check grid for sound warning.
- \* Save Data button : No matter the data record situation is Run or Pause, every time you press the button would record data one once.

- \* Chart Display button : Change to Chart Display screen
- \* Text Display button : Change to Text Display screen

#### 4-4 Text Display

1. Page setup sheet (Fig-6).

Select the group that is suitable your measurement, and select a channel for each display,

Change to "2 channel Display" sheet, you can see the setting result.

 Channel Display sheet (Fig-7) The light blue grid shows the unit selected. The Light orange grid shows the channel selected..

#### 4-5 System Monitor ( Chart Display Fig-8 )

- 1. Enter a number into the "Y-Max" and "Y-Min" grid to set the Y-axis max. and min. value.
- 2. Press the button " Set Y-Axis Min\_Max " every time to make the new setting value work

#### 4-6 Data Query

Select the Data Query from the "Report "menu in the Measurement system dialog box. (See Fig. 1) to entry the "Data query "program. (See Fig. 9)

- \* Before make the data query, you should firstly select the Database (Chan. 1 to Chan. 8) and the sampling date.
- \* If user intend to have period data analysis, please check the grid in front of the " Add Time condition ". Key in the time in the " Start Time " and " END Time " grid.

- 1) Click the " Data Query " button, and each data would be listed in the data list icon.
- 2) Click the "Show chart "button to show the data recorded with chart display.
- 3) Click the "Print Chart " and " print Data " button to print the detail of data recorded.
- 4) Click the " Clear Chart " button to clear the chart display.
- 5) \* Enter the chart's header and in the " Header " grid.
  - \* Enter the chart's footer and in the "Footer " grid.
  - \* Enter numbers in "Y-Max " and "Y-Min " to set the Y-axsis.
  - \* Enter numbers in "Y-Grid " and "X-Grid " to divide the chart with vertical line and horizontal line and the numbers you entered is the interval of two line.
- 6) Click on "Setup " button to display it on the chart.
- 7) Click Setup button every time when the setting value has been changed to make a new setting value work.
- 8) Click "Exit" to close the program.

## 5. INTERFACE CABLES (optional)

# The exact optional cable that will cooperate with the instrument and the computer are :

#### UPCB-01 or USB-01 available models :

AM-4203	DO-5510	HT-3006A	TM-906A	UVC-254
AM-4204	DO-5511	HT-3015	TM-907A	VB-8200
AM-4205A	EM-9100	LX-105	TM-908	VB-8201
AM-4206	EM-9200	MS-7000	TM-910	VB-8202
AM-4206M	FG-5005	PH-207	TM-915	VB-8213
AM-4213	FG-5020	PM-9100	TM-917	VB-8220
AM-4216	FG-5100	PM-9107	TQ-8800	VC-9200
CD-4303	GM-300P	PS-9302	UVA-365	

#### UPCB-02 or USB-01 available models :

AM-4210	DT-2269	HD-3008	LX-1118	PPH-221
CD-4306	DW-6090	HT-3009	MY-81AP	RGB-1002
CD-4322	DW-6091	HT-306	MY-91HT	SL-4012
DM-9031	EM-9000	HT-315	PDT-2250	SL-4013
DM-9093	EMF-829	LCR-9073	PH-208	SL-4112
DM-9680	FG-5005	LX-110	PH-221	TM-2000
DO-5519	FG-5020	LX-1102	PHT-3109	TM-903A
DT-2230	FG-5100	LX-1108	PPH-2108	TM-9126

#### UPCB-02 or USB-01 available models :

TM-925	TM-949	YK-2004AH	YK-2005RH	YK-80AM
TM-926	TQ-8801	YK-2004CD	YK-2005TM	YK-80AP
TM-929	VB-8203	YK-2005AH	YK-2005WA	YK-80AS
TM-936	VT-8204	YK-2005AM	YK-2014CD	YK-90HT
TM-939	YK-2001PH	YK-2005CD	YK-22CT	
TM-946	YK-2001TM	YK-2005LX	YK-22DO	

#### UPCB-04 available models :

FG-500A-232	FG-20KG-232

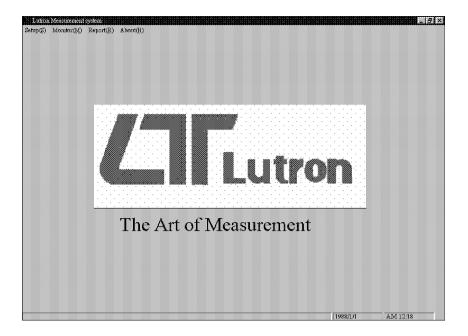


Fig. 1

	Test Denker Prog.
System Scan Rate 2	Text Duplay Type 🛛 🔽 💽 💽 💽
(2-3600 Sec) 1 -	Angular Display Type 2 Display 💌
Max Record Data 1000	Chart Display Chan 2 🛋
Comm. Port 1	
	C Iderer with one Display
	🤊 Merrer with two. Display
	C Meter with 4 Display or more display

Fig. 2

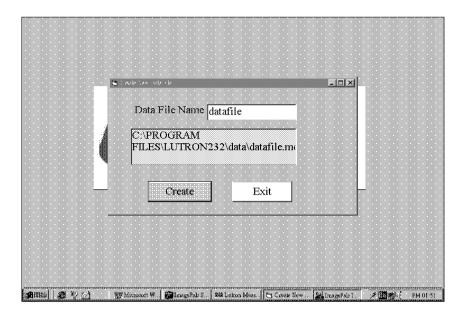


Fig. 3

S. Angolar 2/4 Display 2 Angolar Display	4 Angular Disp		
Page Ssing	1 Angular Displ		1988-01-01
-One Display	n de gran de la companya de la comp		00:24:45
Display 1 1 🔸	Channel No 1		
	Min Value	0	0000006
Two Display	MaxValue	80	
Display 1 1	Large Tick Delta	10	Scan Pate
Display 2 2	Small Tick Delta	5	2 sec
	Label Delta	10	
Dene Bright in the second second	High Warning	70	
Display 1 1	Low Warning	50	
Display 2 2 👻	Decimals	1	✓ AlumSound
Display 3 1	Scale	1	i≪ munsoonu
	🕫 Unit Auto Sense		
Display 4 2	Manual Unit		Save Data
· · · · · · · · · · · · · · · · · · ·			
Chart Display Text Display		Exit	

Fig. 4

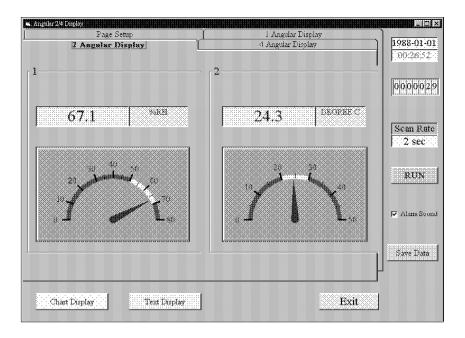


Fig. 5

6 Channel Display 2 channel Display <b>Page Setup</b>	8 Channel Display 4 channel Display 1 Channel Display	1988-01-01 00:27:29
-Two Channel Display Display 1 1 - Display 2 2 -	One Channel Display           One Channel Display           6 Channel Display	Scan Rate
-4 Channel Display Display 1 1 • Display 2 2 • Display 3 3 •	Display 2 2 • Display 3 3 • Display 4 4 •	PALSE
Display 4 4 Save	Display 5 7 + Display 6 8 +	Save Data

Fig. 6

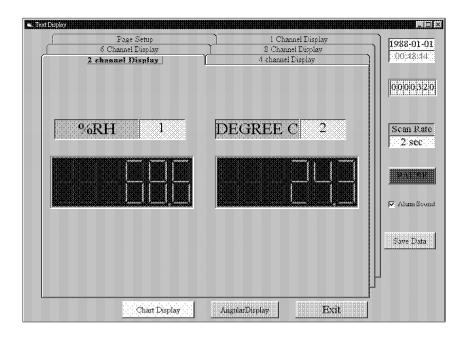


Fig. 7

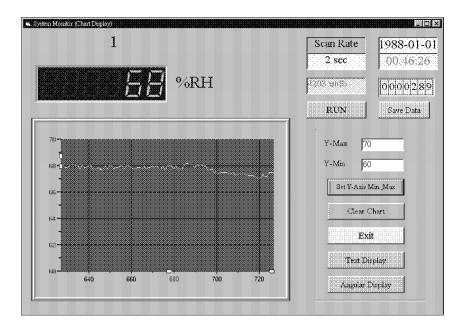


Fig. 8

Chart 1	Chan 5 Chan 6	Start I	)abe  1988/1/1	End Date 1988/1/1
E Chan 3	C Chan 7	Start I	me :	END Trane
E Chan, 4	C Chan 3	□ Ad	d Time condition	h mm - hh(0-33) mm(0-59)
8694 No 70	date 1988/1/1 1988/1/1 1988/1/1 1988/1/1 1988/1/1 1988/1/1	tons 12:54:33 AM 12:54:35 AM 12:54:37 AM 12:54:39 AM 12:54:41 AM 12:54:43 AM	chen 1 wut 1 * 68.3 %RH 68.6 %RH 68.5 %RH 68.3 %RH 68.3 %RH 68.3 %RH *	Data Query Show Chart Print Chart Chere Chert Print Data Exit
	Chart /	alyris		Header Chart Analysis Footer odel : HT-3005
80			1 <sup>80</sup>	Y-Max 80
60				Y-Min 0
40			40	Y-Grid 4
20			20	X-Grid 0

Fig. 9

0703-SWU801