EMDL700

Environmental Sound/ Temperature and Humidity Datalogger

CE

Introduction

Congratulations on your purchase of the Triplett EMDL700 Environmental Sound/ Temperature and Humidity Datalogger with touchscreen. The EMDL700 measures and records sound levels, temperature, relative humidity, and dew point in real time and displays the readings in digital and graphic formats. The touch-screen menu allows you to program datalogging parameters and to customize the graphic display. Eight (8) GB of memory is included for capturing large amounts of data, easily transferrable to a PC (in CSV format for convenient integration with the most common programs).

Features

- Records up to 20,000 data points
- 7" high-resolution touch screen color LCD display (1024x600)
- Real time graphical curve with zoom and digital display of readings
- Brightness adjustment and screen saver with adjustable start time
- High/Low audible and visual alarms (high alarm only for sound)
- 1 second to 24 hour sampling rate with manual start/stop
- Progress bar indicates used/free memory
- ±1.4dB accuracy (IEC61672 -1 Class 2)
- User selectable °C/°F
- Max/Min
- Date and time setting
- USB interface for downloading recorded data to your PC in CSV format
- Built-in desk stand and wall mounting bracket
- Comes complete with sensor probe with 3.3ft (1m) cable, windscreen, USB cable, 3.7V Lithium battery, and AC adapter/charger

Common Applications

- Labs
- Hospitals
- Greenhouses
- HVAC systems
- Office spaces

- Classrooms
- Museums
- Clean rooms
- Calibration labs
- Environmental monitoring
- Health care facilities
- Storage/warehouse monitoring

Meter Description

1. Touch Screen
2. ON/OFF Button
3. Microphone
4. RH Extension Cable
5. Temperature and Humidity Probe/Sensor
6. Support Frame/Tilt Stand
7. Type-C USB Connector
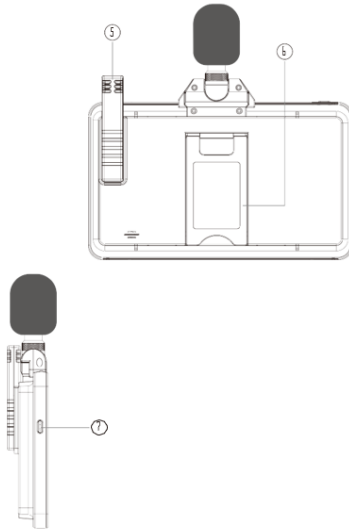
User Interface & Operation

1. Menu function
2. Memory progress bar, "used" indicating used memory, "Free" indicating the remaining memory
3. System real time clock
4. Battery capacity
5. Numerical scale of the temperature, humidity and noise
6. Three curves represent trend of temperature, noise and humidity
7. Numerical scale of date and time
8. Start/Stop recording
9. Max/Min
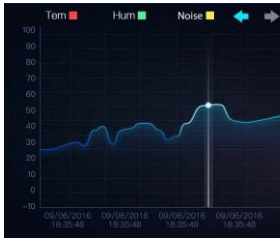10. Value of real-time temperature, humidity and noise

The datalogger will automatically give a better HD view in order to watch, when no one is operating it more than 1 minute. As shown below:

• In this picture, it will jump back to the main interface when you touch the screen.

.**Chart Area**

- Red curve indicates trend of temperature

- Green curve indicates trend of humidity.

- Yellow curve indicates trend of noise.

- Ordinate scale indicates the value of temperature, humidity and noise.

- Abscissa indicates the date and time.

- The value of a certain point in time. (There will be a yellow line if you touch the area of curve and you can move it by click the "Last/Next" icon << >>).

Digital Area (Timeout Screen)

- 1."Temperature" indicates value of Temperature.
  2."Humidity" indicates value of Humidity.

- 3."Noise" indicates value of Noise.

- 4.If an alarm occurs, an alarm icon will appear.

Menu

Click Menu Button in main interface to come into below interface, can set various parameters and view version information etc.

General Setup

Set parameter of temperature units and alarm value of Temperature/Humidity/Noise.

1.Temperature Unit: switch to units °C/°F.

2.Alarm: check the box to set alarm value of the temperature, humidity and noise. 3.Click "Save" to save setting parameter.
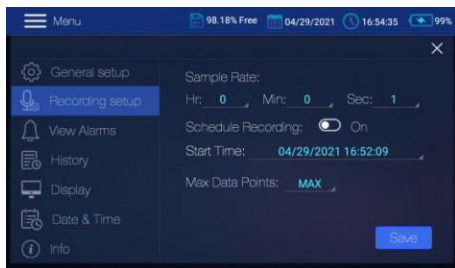
Note: After save the alarm value, if the alarm is triggered, the lamp will light up and send beeps,

such as box shown in the pictures below:
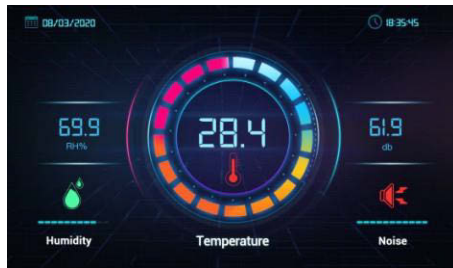
Recording Setup

Set recording sampling rate and total number of samples.

1.Sample Rate: Set recording rate, the minimum is 1s.

2.Schedule recording: The recording will start automatically when the set time comes.

3.Max data points: Set total record points.

Alarms

View recorded alarm value.

1.Sort by date: View recorded alarm value by date sorting.

2.Sort by value: View recorded alarm value of noise, Temperature and Humidity.

History

• Review history data: Select "All" and click "Delete" ,it will delete all history files.

- Click history recorded files, and pop Open/Delete option, select anyone and "Delete", it will delete the history file that you select.
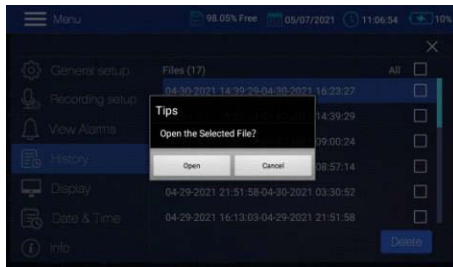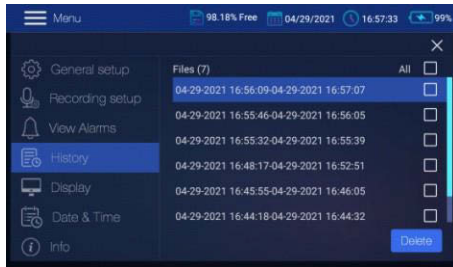
- If select Open, it will jump to the history recorded interface, as follows.

• CSV Files: CSV file is generated automatically , and could be reviewed after connected to the computer, the method of the csv files import into the computer:

1.Connect the instrument to the computer via USB cable, and "Datalogger" will appear on the computer.

2.Click "Datalogger" to open "USB storage", CSV files are stored in the rh-t data folder.

3.Open any CSV file to view the Temperature, Humidity and Noise data recorded in the instrument history (Note: CSV file is similar to Excel file, computer itself needs to install such tools).

	A	B	C	D	E	F	G
1	NO.	Temp(Fahr	CO2	Dew point	Time		
2	1	71.2	6000	57.7	01/01/2015	06:41:30	
3	2	71.2	6000	57.7	01/01/2015	06:41:31	
4	3	71.2	5890	57	01/01/2015	06:41:32	
5	4	71.2	5800	56.8	01/01/2015	06:41:33	
6	5	71.2	5700	57.4	01/01/2015	06:41:34	
7	6	71.2	5700	58.6	01/01/2015	06:41:35	
8	7	71.2	5690	57.9	01/01/2015	06:41:36	
9	8	71.2	5680	57.9	01/01/2015	06:41:37	
10	9	71.2	5670	57.7	01/01/2015	06:41:38	
11	10	71.2	5660	57.2	01/01/2015	06:41:39	
12	11	71.2	5500	56.5	01/01/2015	06:41:40	
13	12	71.2	5400	55.9	01/01/2015	06:41:41	

Display

Adjust the brightness of screen.
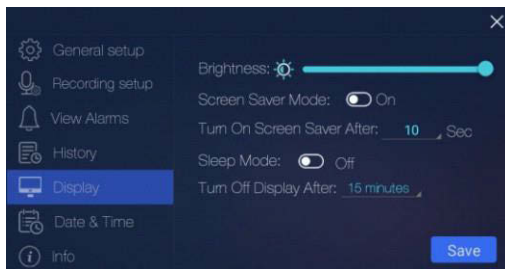
1.Brightness: Drag Brightness button to adjust brightness of screen.

2.Screen saver: Set the automatic screen saver time, active only after turn on the screen saver mode. 3.Sleep Mode: Set starting time of screensaver: 15 minutes, 30 minutes, 4 hours, 12 hours and
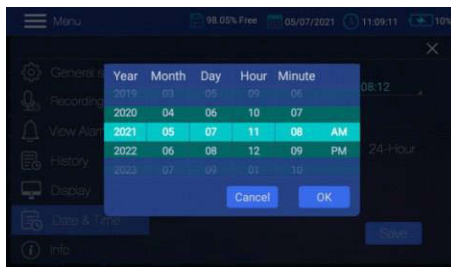
Never, active only after turn on the sleep mode. 4.Click "Save" to save setting parameter.

Date & Time

• Click the area of time to set date and time.
• Choose Date format.
• As fellows:
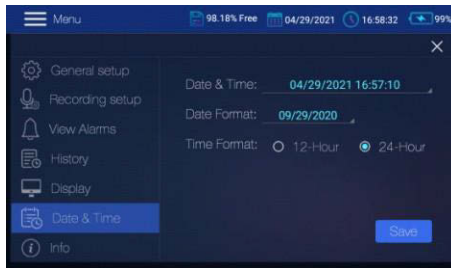
• Setup the time and click the "YES" will modify the system time.

Info

View instrument information and upgrade.

1.Version: Current versions.

2.Update: Click the button to update software.

Note: The upgrading app is follows:

• The instrument is connected to the computer via a USB cable.
• Find out in hard drive of the instrument in the computer, and then copy the latest APP to the download directory of the instrument.
• Click "Update" to realize upgrade.

Exit Menu

Click this button to return to main UI.

• If necessary, use wet cloth and non-irritating detergent to clean the equipment and wipe the machine case.
• Do not use corrosive or irritating cleaners.
• Clean the display with a dry, smooth cloth.
• Do not immerse the product in water or other liquids.

Specifications

Temperature	-4 to 176°F (-20 to 80°C)
Accuracy	Accuracy：±0.5°C/0.9°F at -10 to 40°C/14 to 104°F (For Tablet) ±1.5°C/3.0°F at -20 to -10°C/-4 to 14°F (For Sensor Prob) ±0.5°C/0.9°F at -10 to 80°C/14 to 176°F (For Sensor Prob)
Relative Humidity	10 to 95%RH
Accuracy	Accuracy：±2.5%RH at 20% to 80%RH ±3.0%RH at 10% to 20%RH/80% to 95%RH
Sound Level	30 to 130dB
Accuracy	±1.4dB (1kHz)
Frequency Range	31.5Hz to 8kHz
Frequency Weighting	A and C
Response Time	Fast (125ms) and Slow (1s)
Resolution	0.1°F/°C; 0.1%RH/0.1dB
Memory	16GB
Datalogging Points	20,000 points total
Sampling Intervals	1sec to 24hr
PC Interface	USB
Power	3.7V Lithium Battery/5V 2A AC Adapter
Dimensions	7.1 x 4.5 x 0.7" (180 x 115 x 18mm)
Weight	1lbs (450g)