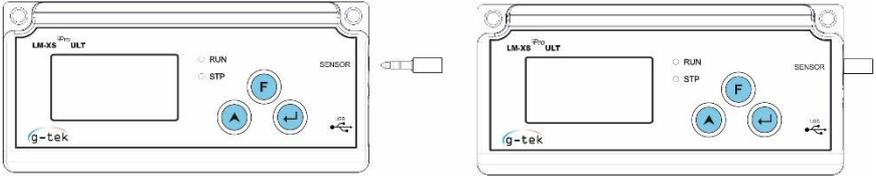


# LM-XS<sup>Pro</sup> ULT – Quick Start Guide

## Installation the LM-XS<sup>Pro</sup> ULT Data Logger

Please connect the sensor before Activating the **LM-XS<sup>Pro</sup> ULT** data logger as shown in below image:



## Activating the LM-XS<sup>Pro</sup> ULT Data Logger

The data logger is delivered in “sleep mode” with the LCD screen blank. Every LM-XS<sup>Pro</sup> ULT Data Logger must be activated before its first use. Press and hold “Up” button, continue to hold while all segments of display are turned ON (Approx. 5 Seconds). The Data logger will show “DTF” - ready for the date and time setting.

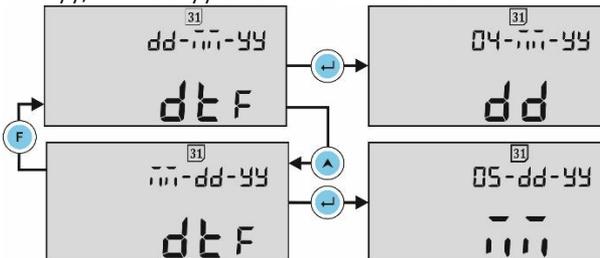


Press UP Button Approx. 10 seconds

**Note:** If user does not press any key, device will go to sleep mode again (within 1 minute).

## Setting the date format

Once Activated, the display show “DTF”. Press “Up” button to select date format dd-mm-yy/mm-dd-yy and “Enter” to store.

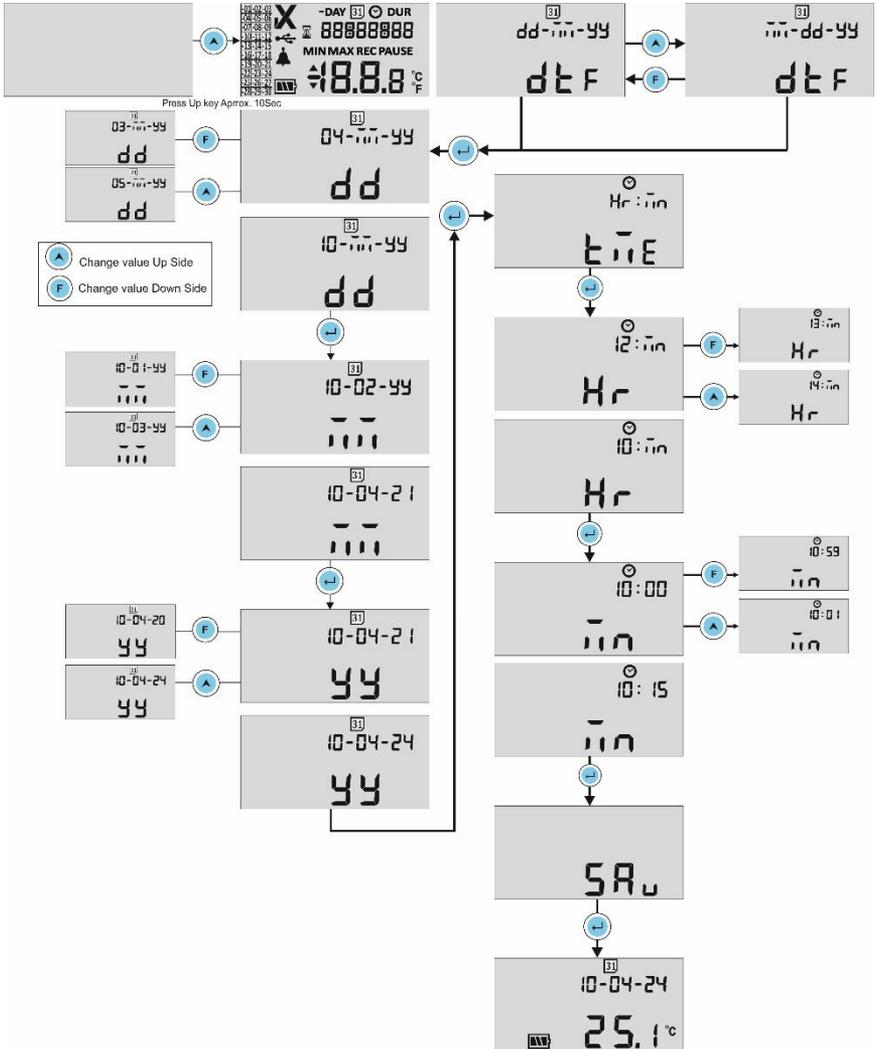


**Note:** Once selected, date format cannot be changed throughout the life of data logger.

## Setting the Display date and Time

Once date format is selected, press “Enter” button, display will show “dd”. Press “Up” to increment and “Function” to decrement value. Press “Enter” to save. Similarly, set mm (Month), yy (Year), Hr (Hour) and Mn (Minutes). The data logger displays a 24 hour clock.

When date and time are set, data logger will show “SAV” message, press “Enter” to save date and time. After RTC is set, “STP” LED will be flashing & room temperature will be seen on device display.



## Configure the Batch in LM-XS<sup>Pro</sup> ULT Data Logger

To configure LM-XS<sup>Pro</sup> ULT data logger, connect it to software application via USB port and configure the batch parameters. For more information, please refer to the Help menu of the software.

Click on “Edit” button and set the required alarm parameters as shown in figure. For more details, read device operating manual.

The screenshot shows the 'Setup Batch' window with the following configuration details:

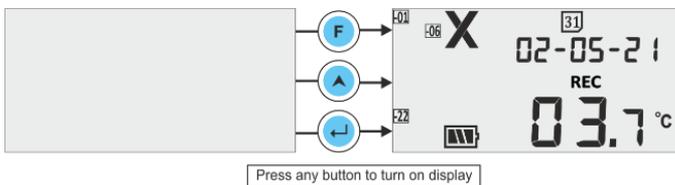
- Batch Parameters:**
  - ID Number: ENGINEER
  - Batch Name: G-TEK CORP
  - Alarm Temperature High: 8
  - Alarm Temperature Low: 2
  - Alarm Delay High: 0 hr 1 mn
  - Alarm Delay Low: 0 hr 1 mn
  - Alarm Off Delay: 0 hr 5 mn
  - Unit Temperature CF: Deg C
  - Date Time Format: dd-MM-yy HH:mm
- Readings:**
  - Store Interval: 0 hr 0 mn
  - Number Of Readings: 52561
- Date And Time:**
  - Current: 04-Feb-2021 12:47:26
  - Start: 01-Jan-2021 12:00:00
  - Stop: 04-Jan-2021 13:00:00
- Display:**
  - Auto Off Display (selected)
  - Permanent On

Buttons at the bottom: Edit, Configure Batch, Reset, Exit.

**Note:** New configuration will delete previously recorded batch data. Please make sure to back up stored data before you configure the new batch for the device.

## Recording of the Data

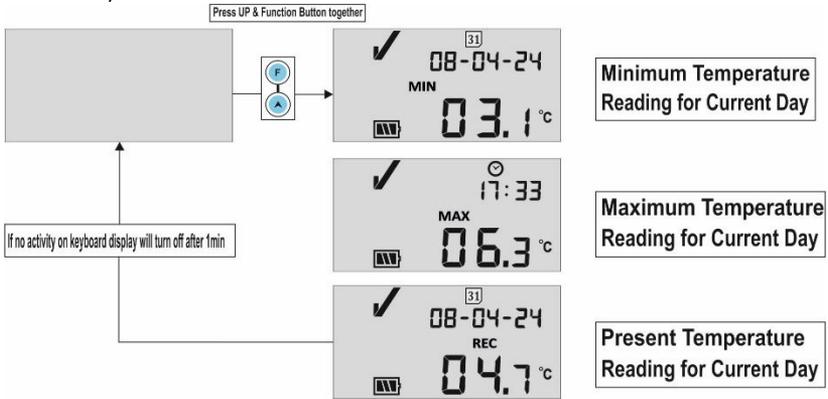
The measurement will be started as per the selected start time in the configuration using LMViewXSE006-Uni Application. The data logger starts collecting data and shows the message “REC” on the display. By pressing any keys for approx. 1 sec, the display will show current data.



**Note:** Current date and time is displayed in rolling manner with 3 seconds time interval on display.

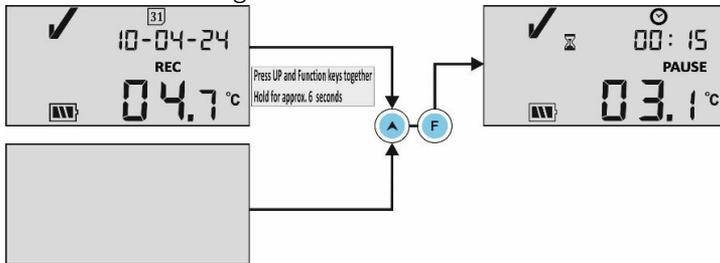
## View Current day Min/Max Value

By pressing “Function” and “Up” keys together for approx. 1 sec, the display will show Current day Minimum and Maximum temperature value followed by current data.



## “PAUSE” Function

Press and Hold “Function” and “Up” buttons simultaneously for approx. 6 Sec. Data logger will enter in “PAUSE” mode. Display will show “PAUSE” along with current reading.



After 15 minutes, device will resume normal operation and “PAUSE” will disappear and “REC” will be displayed. During these 15 minutes interval, data recording will continue but these data will be excluded from the alarm and min/max statistics.

This allows user to review the statistics or clear an alarm without causing an invalid reading, alarm or statistics.

## Recording Display

While recording the display is updated every 1 minutes, showing the most recent temperature reading taken, the current time and combined alarm status and history.

### Example:

Display shows alarm occurring 5 and 21 days ago. Current temperature is below the lower alarm limit of  $-0.5\text{ }^{\circ}\text{C}$  (indicated by the down arrow) but the duration is not enough to trigger an alarm.



1 hour later the low alarm temperature duration triggers an alarm. The bell (Alarm) symbol is seen, buzzer triggers (audible).



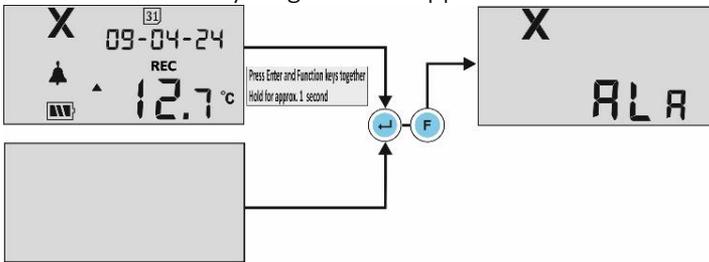
A further 3 hour later the temperature has returned to the acceptable range. The day summary has shifted by -1 day as the time has gone through midnight.



**Note:** Alarm High/Low setting parameters are prefixed.

### Alarm acknowledgement

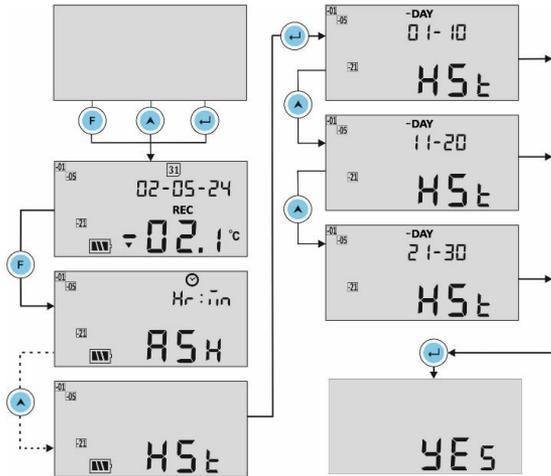
When an alarm event occurs, the Bell (Alarm) symbol is displayed, and buzzer will active (audible). To acknowledge the alarm, press and hold “Enter” and “Function” keys together for approx. 1 sec.



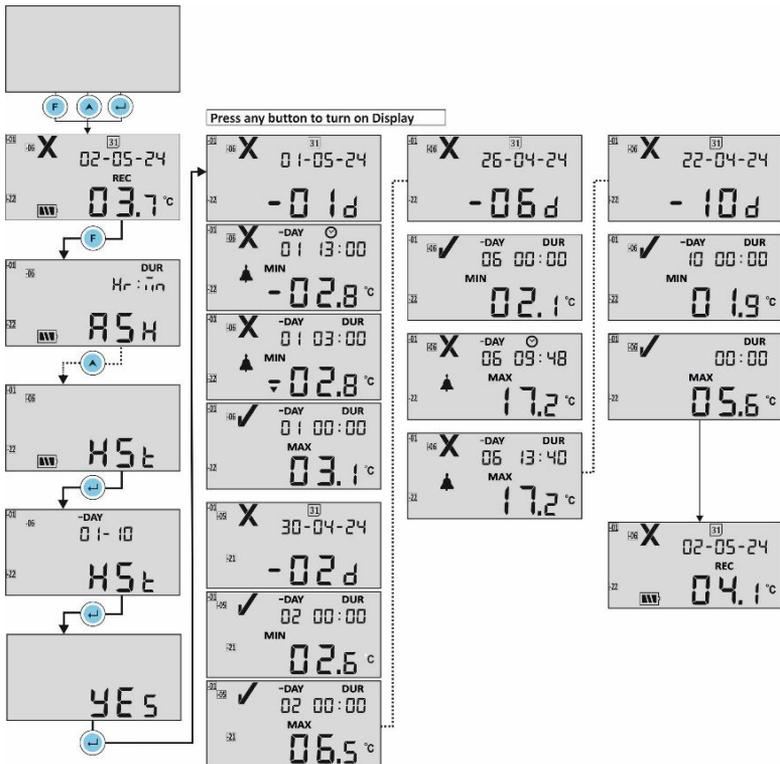
Buzzer will be deactivated for alarm acknowledgement time (1 hour); alarm events are stored and can be reviewed in PDF report.

### Reviewing Day Statistics

The user can see the history data of min/max values for last 30 days using history menu. In this menu, the user can choose the history days from the options as shown in figure.



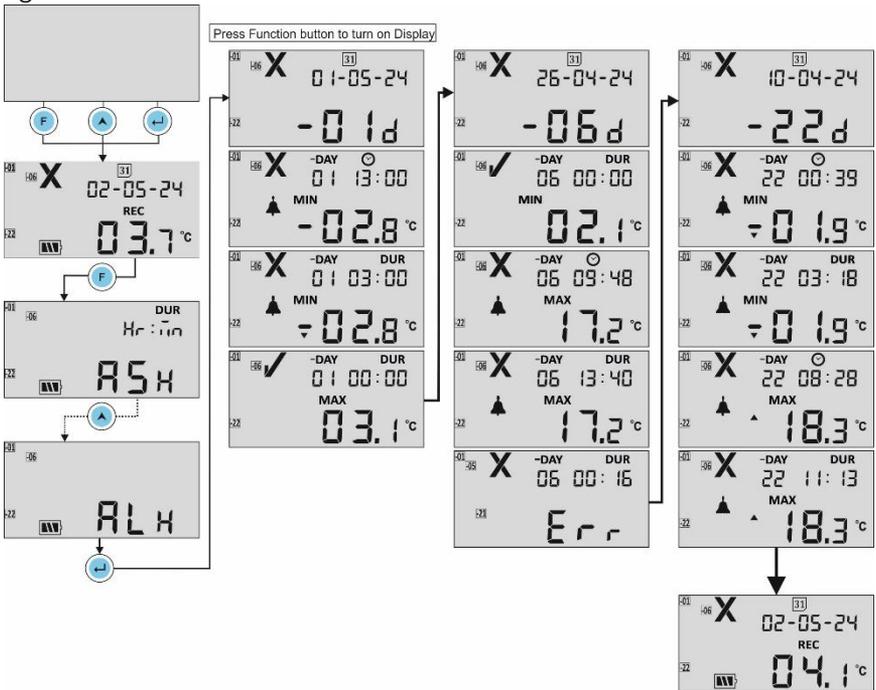
**Example:** If the user chose 01-10 days option, then the display will be showing the date of “-01” day, alarm trigger time (In case of alarm), history data for Min & Max values along with its duration and sensor open/broken condition duration (if any) in sequence up to last 10 days with approx. 3 sec time intervals as follows:



If less than 30 days of recordings have been collected, the day marker only advances to the earliest day of recording. After the statistics for the earliest day have been displayed, then display show normal recording display again.

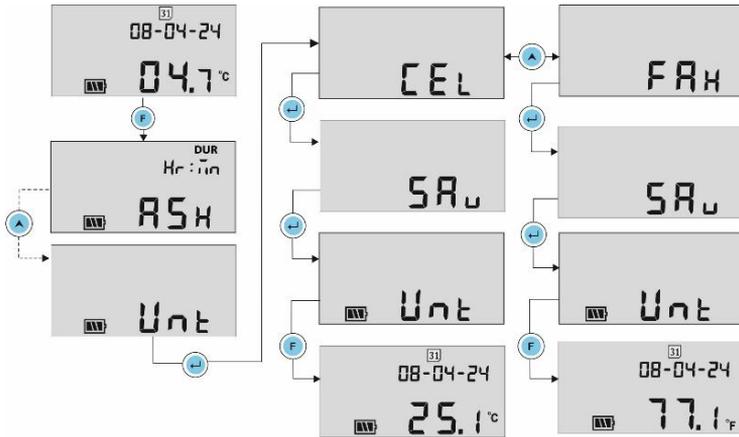
### Reviewing Alarm Statistics

The user can see the alarm history data of min/max values for when the alarm trigger in last 30 days using Alarm history (ALH) menu. Here, the parameters display sequence is same as history data view menu, except that its only showing history with alarms. Example: Display shows alarms occurring 1,6 and 22 days ago. Then alarm history data view as per below figure.



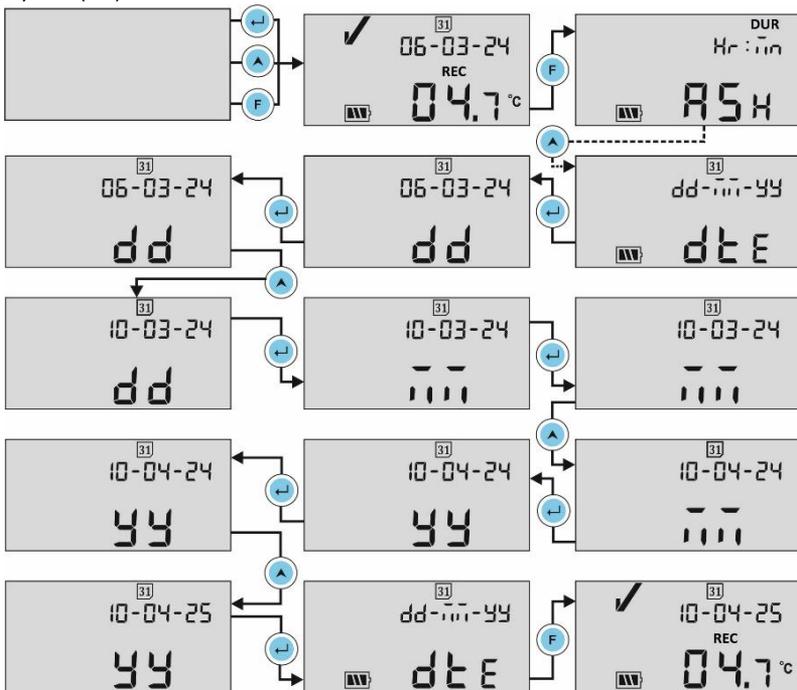
### Unit Change

The LM-XS<sup>Pro</sup> ULT data logger displays current temperature in degree Celsius (°C). The user can view the data in degree Fahrenheit (°F). Default unit is degree Celsius (°C).



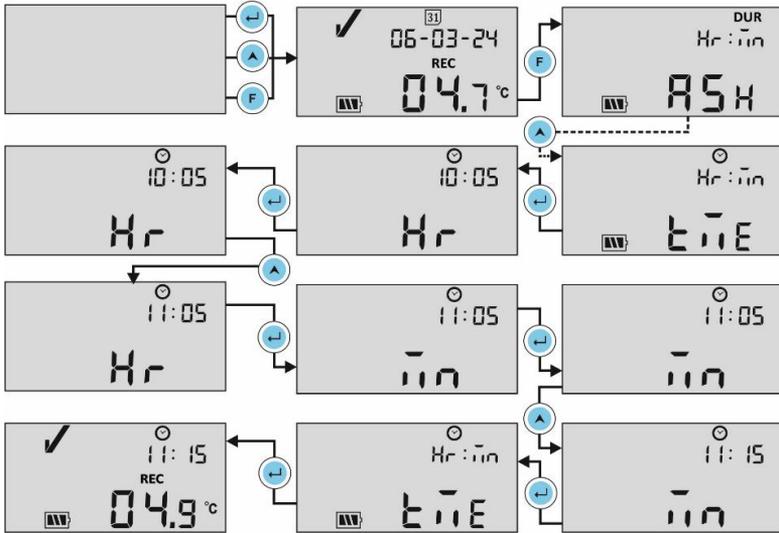
## Date Change

Press any button to turn on display. User can change date in “REC” mode and “STP” mode. Press “Function” button, display will enter menu sequence. Follow sequence as per figure to change day(dd), Month (MM) and year (YY).



## Time Change

Press any button to turn on display. User can change time in “REC” mode and “STP” mode. Press “Function” button display will enter menu sequence. Follow sequence as per figure to change hour (Hr) and minutes (Mn).



**Note:** Blinking Segments in the menu indicates current selection.

## Stop Recording the Data

The recording of the data will be stopped by one the following ways:

1. The batch will be stopped on the maximum no. of readings has reached.
2. Press “Up” key for 10 seconds, “Stp” message will appear on display for 3 seconds.



Press Up key Approx. 10Sec

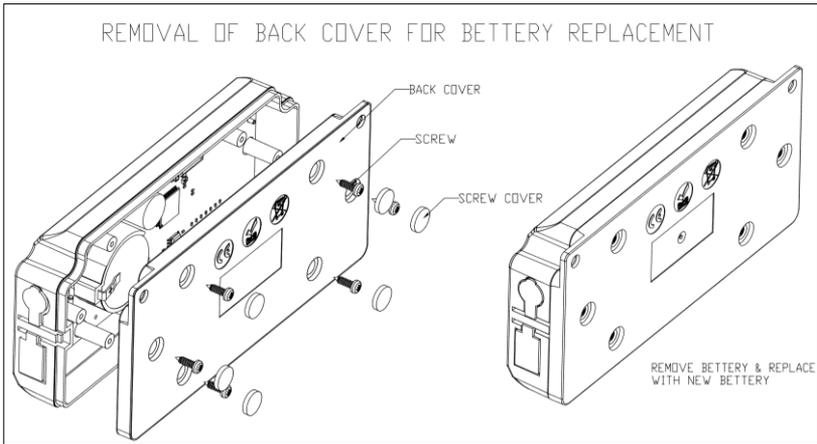
3. By connecting the device with the LMViewXSE006-Uni application, using “Reset Device” option.

Once the recording stops, “REC” message disappears from the device display and “RUN” LED turns Off and “STP” LED starts flashing.

## Battery

The **LM-XS<sup>Pro</sup> ULT** data logger contains a Lithium Battery. The end of the battery life is indicated by a low battery symbol, the data logger should be replaced within 15 days when this symbol appears.

Download the stored data before replacing the Battery. Configure the new batch after replacing the battery.



Dispose or recycle the battery in accordance with your local regulations.

Do not expose the Data Logger to extreme temperatures as it may lead to the destruction of the battery and may cause injuries.

**“Warning, Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.”**

\*For detailed information regarding **LM-XS<sup>Pro</sup> ULT** data logger, please refer **LM-XS<sup>Pro</sup> ULT** Operating Manual.

The **LMViewXSE006-Uni** software allows user to configure, download, view, analyze and generate reports in pdf format.

Please use following link to download the Application:

<https://www.gtek-india.com/product/data-loggers/lm-xs-pro-ult/>