



LynxPro User Guide



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LynxPro Overview



Play Button:

When device is in Manual Mode this button can be used to start the device or mark specific readings

Bluetooth Button:

Used to enable/disable Bluetooth broadcasting

LCD Screen:

Displays current status and readings

Battery Door:

User replaceable CR2450 battery

Alarm:

Alarm is activated

Bluetooth:

Visible when Bluetooth is turned on. Additional blinking arrows when connected to app. When connected to external power, Bluetooth will remain on

Running:

Will flash when actively running. Solid when waiting to start (manual mode)

USB Connect:

Connected via USB to power source

Battery:

Health monitor of the device battery

Current Reading:

The last reading the LynxPro has taken

App Overview

Home/Devices Page

Devices that you have previously claimed appear here. A quick overview of each device is provided.

Serial Number:

The non-editable serial number for the device.

Device ID:

The customizable name each device is given. This can be changed in the Device Settings page.

Connection Level:

The Bluetooth connection level to the device. In order to improve this, move your phone or tablet closer to the device.

Current Status:

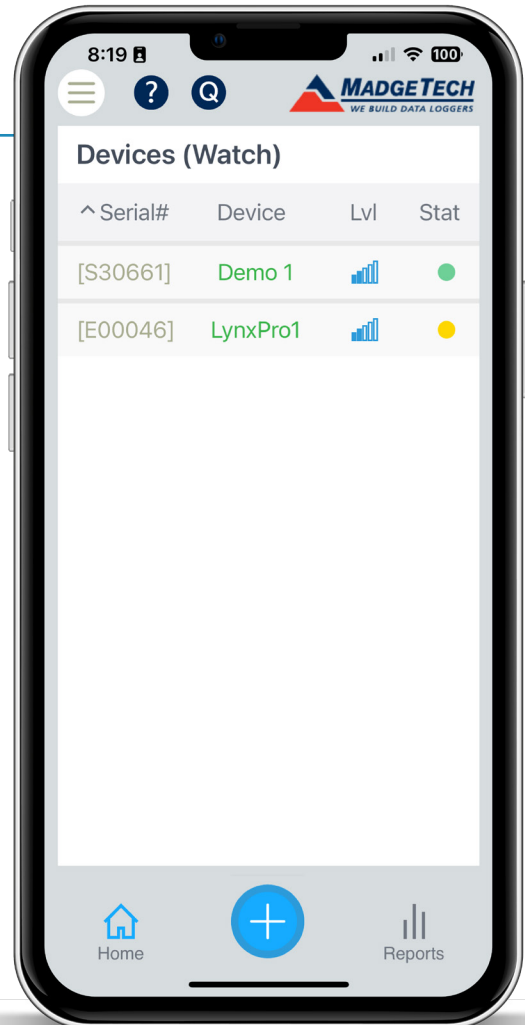
The Current Status is color coded as:

Gray: The device is out of range or the Bluetooth is not enabled

Solid Yellow: The device is in range, but idle

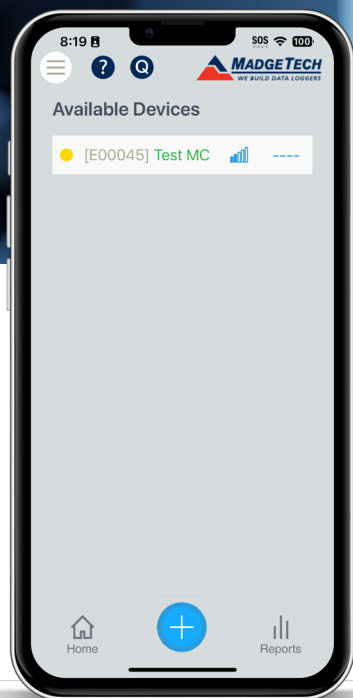
Blinking Green: The device is in range and set to Manual Start which requires starting either via the Play button on the device.

To remove a device from your list, slide to the left.



Green: The device is actively logging

Red: The device has detected alarm conditions



Add Devices Page

Devices that have Bluetooth enabled that have not previously been claimed by the current phone will appear here. If you do not see your device, move the phone closer to it. Click on a device to add it to your Home/Devices page.

Reports Page

Displays all previously created reports. Reports can be sorted based on date or utilize filtering as outlined below:

Show All: Will display all currently available reports.

Show Alarms: Will display only reports with data that has triggered alarms.

Show PDF: Will display only reports saved as PDFs.

Show .csv: Will display only reports saved as .csv files.

Show SN: Filter by serial number/device ID

Show Anomalies: Show only problem reports

Show Not Shared: Show only files that have not been shared

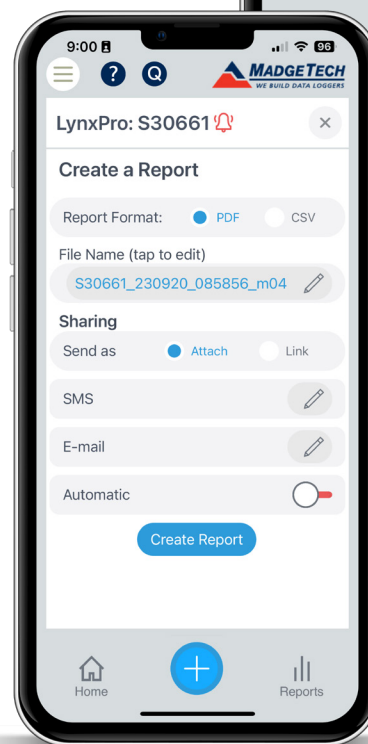
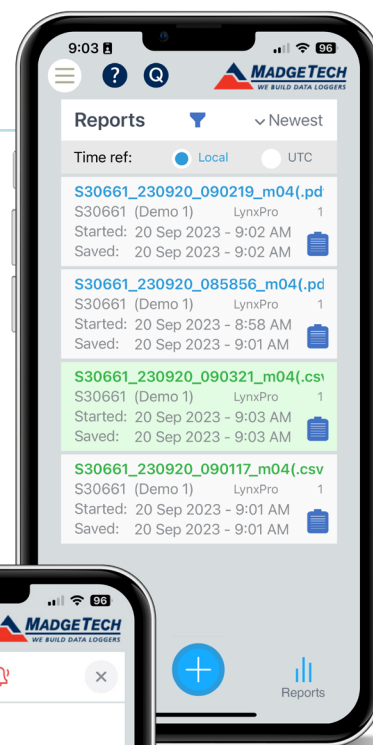
Reports highlighted in red contain an alarm condition.

Reports with blue title are a .pdf, while green titles signify .csv files.

Click on the report icon to see a report summary and graph. The green check mark on report indicates that the report has been shared.

To share a report, click on the desired report. Determine whether to use defaults to send to contacts set in App Settings or Select App to share to other contact(s).

To delete a report, slide left.





Top Navigation Bar

Main Menu

Clicking the main menu in the top left corner will launch the Main Menu.

Help

Launches a series of resources including User Guide, Online Support, FAQs, Licence Agreement, Privacy Policy, and a Contact Us link.

Watch

Launches the Devices (Watch) page.

Add

Launches the Add Devices page.

Reports

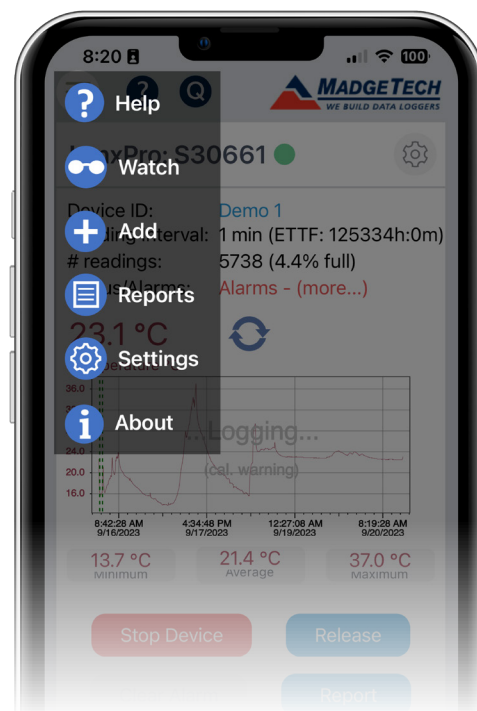
Launches the Reports page.

Settings

Launches general settings for the app.

About

Provides information regarding the current version of the app you are running.



Quick Access Buttons

Help Button

Initiate in-app, on-page guided assistance.

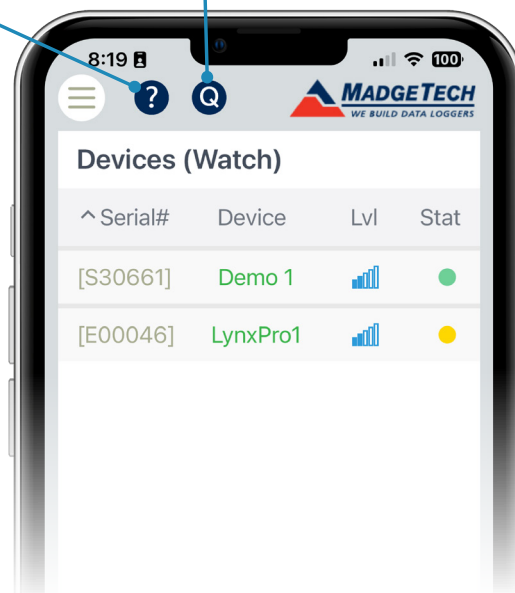
Quick Connect Button

Enable or Disable Quick Connect.

When Quick Connect is on and Bluetooth is enabled, the device will automatically connect and download readings when within range. If Automatic Report Generation and Automatic Report Sharing are also enabled, Quick Connect will automatically connect, download data, generate a report and share the report to the default contact.

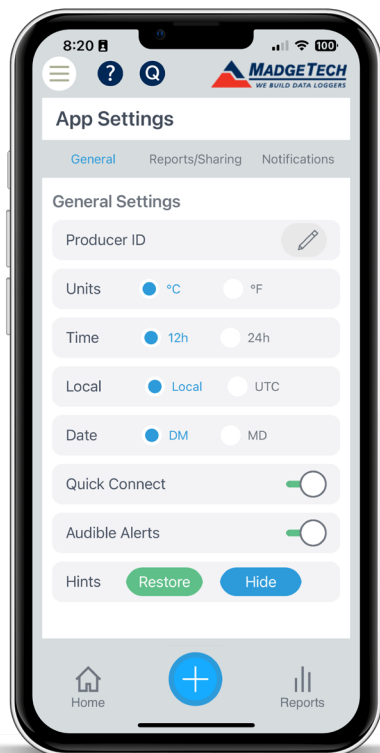
Help Button

Quick Connect Button



Settings

The App Settings screen allows preferences to be set for the app.



General Settings

Producer ID: A user-defined label on each report used to identify the associated person, device, or location

Units: Select whether to display readings in Celsius or Fahrenheit.

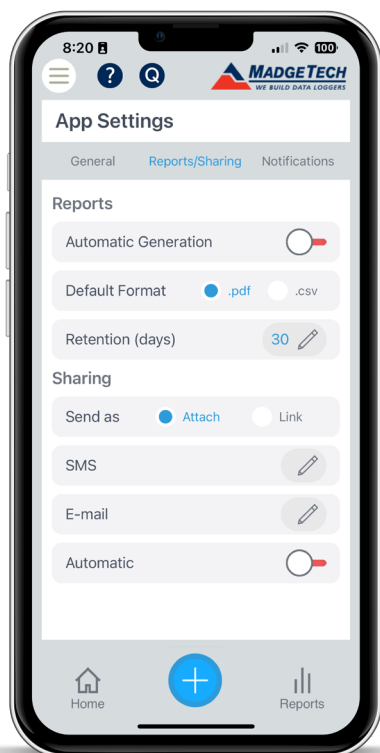
Time Format: Select whether to use a 12- or 24-hour clock.

Date Format: Select between the Day-Month (DM) or Month-Day (MD) date format.

Quick Connect: When Quick Connect is on and Bluetooth is enabled, the device will automatically connect and download readings when within range. If Automatic Report Generation and Automatic Report Sharing are also enabled, Quick Connect will automatically connect, download data, generate a report and share the report to the default contact. Quick Connect can also be toggled on or off using the 'Q' button located in the top navigation.

Audible Alerts: Enable or disable audible alarms.

Pop-Up Hint Control: Tap Restore to restore all pop-up hints. Tap Hide to hide all pop-up hints.



Report Settings

Automatic Generation: Select whether a report is automatically created when a device is connected, either through Quick Connect or manual connection. Enabling this will automatically clear the device's readings and restart the device once the report has been generated.

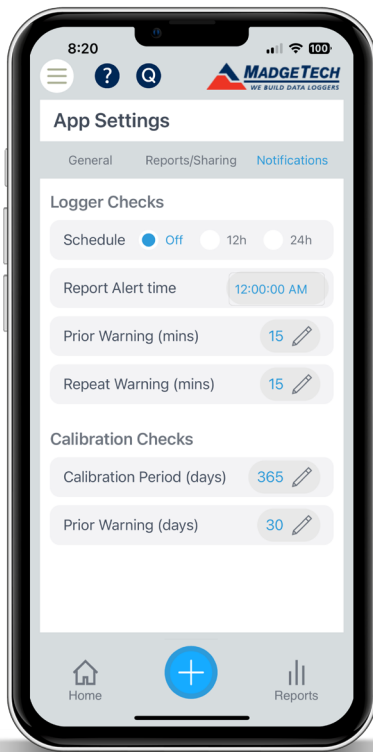
Automatic Report File Format: Select the desired format for automatically generated reports.

Retention Period: Specify the number of days to retain a report before automatic deletion. Will only generate a warning. Will not do automatic deletion but will prompt the operator to do so.

Share by SMS: Specify the number to receive reports. For nonautomatic report sharing, alternate numbers may be used.

Share by Email: Specify the address to receive reports. For nonautomatic report sharing, alternate numbers may be used.

Automatic Sharing: Automatically share report upon creation to the number and/or email above. Note that only successfully downloaded reports are shared automatically.



Notifications Settings

Logger Checks Schedule: Select how frequently daily checks should be performed for VFC requirements

Report Alert Time: Select the time checks should be completed at. For 12 hour checks, the Report Alert Time will be every 12 hours

Prior Warning: Specify how long before the Report Alert Time a notification should be sent

Repeat Warning: Specify how long after the initial warning all subsequent notification should be sent

Calibration Period: Specify your calibration interval, as stated in your Standard Operating Procedure (SOP)

Prior Warning: Specify how many days in advance you would like to receive a calibration reminder.



Device Main Page

The device summary page gives an overview of the current status of the selected device.

Device ID:

The user set name of the device. Tap on the device to see the device specifications

Reading Interval:

The current reading rate of the device. Additionally, ETTF (estimated time to full) estimates the approximate amount of time the device can run with the current reading rate before the device memory is full.

Number of Readings:

The total number of readings currently stored on the device. Additionally, the percentage of how full the device's memory is provided.

Status/Alarms:

Provides the current status of the device as either Nominal (no alarm) or Alarmed (active alarm). Tap on an individual alarm to get details.

Refresh Button:

Used to update the data without having to exit and reenter the device main page.

Graph:

The Graph shows all data currently on the device. Tap the graph to expand view. Dotted lines represent times that have been Marked by pressing the Play button on the device. Minimum, Average and Maximum statistics are also provided for the current dataset.

Device Control Buttons:

Quick Start: Start the device with the current settings.

Clear Alarm: Clear an active alarm on the device.

Release: Will exit the page and remove the device from your Devices/Home Page.

Report: Generate a report from the current data set. You will then be prompted to specify the report format, file name and the number and/or email address to automatically share to. Reports can also be shared from the Reports page after they are created.





Device Settings

The Device Settings page includes all device-specific preferences.

General Settings

Serial Number: Displays the non-editable serial number assigned to the device.

Firmware Revision: Displays the current firmware revision on the device.

Device ID: Specify the desired name to be used on the device.

Model: Displays the model of the current device.

Last Start Date: Displays the last time the device was started.

Readings: Displays the number of readings currently on the device.

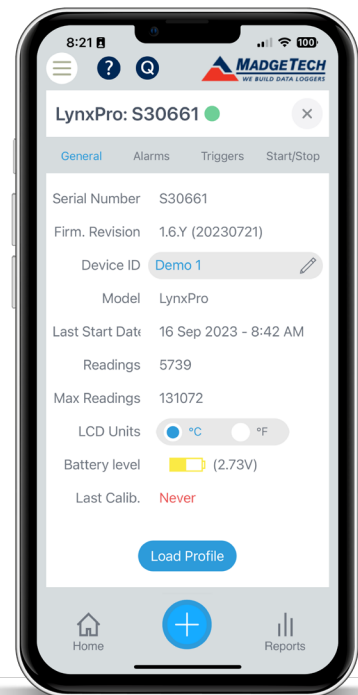
Maximum Readings: Displays the total number of readings the device can store.

LCD Units: Specify whether the LCD should display readings in Celsius or Fahrenheit. Note this will only change the display on the LCD. To change the display in the app and reports, adjust in General App Settings.

Battery Level: Displays the current battery level of the device.

Last Calibration: Date the unit was last calibrated

Load Profile: Access library of previously saved profiles.



Alarm Settings

Enable Alarm: Alarms must be enabled in order to edit alarm settings.

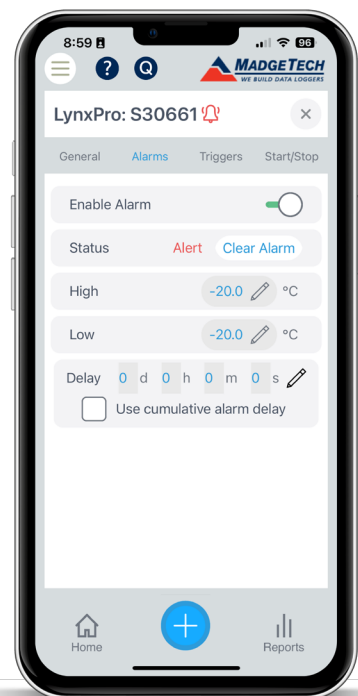
Status: Display whether an alarm is currently active and allow you to Clear Alarm.

High: Set the high threshold for triggering alarm.

Low: Set the low threshold for triggering alarm.

Delay: Specify the length of time the temperature and/or humidity must remain outside of the specified range before triggering an alarm.

Cumulative Alarm Delay: Count the cumulative time from the start of record that the temperature and/or humidity is outside of the specified range to trigger an alarm.



Trigger Settings

Trigger settings can be configured to allow a device to automatically begin and stop recording data when certain reading thresholds are reached.

Triggers can be set in two modes:

Window: Recording will begin when a reading is below the low setpoint, or above the high setpoint. Select Fill Memory on first trigger to continuously record until device memory is full. Alternately, specify the desired number of readings in the Trigger Sample Count field. Recording will stop after that number of readings until the setpoint is reached again.

Two-Point: Set both high and low start/stop setpoints. To begin recording, a reading must be above the high setpoint or below the low setpoint. To stop recording, a reading must be below the high setpoint or above the low setpoint.

Start/Stop Settings

When starting a device to record data, several options and start methods are available. Start settings can be specified before deploying the device.

Start Method:

Now: Starts the device immediately.

Delay: Specifies the exact time and day the device should start.

Manual: Requires the Play button on the device to be pressed to start recording.

Stop Method:

Manual: Requires that the Stop Device button be pressed on the Device Summary Page.

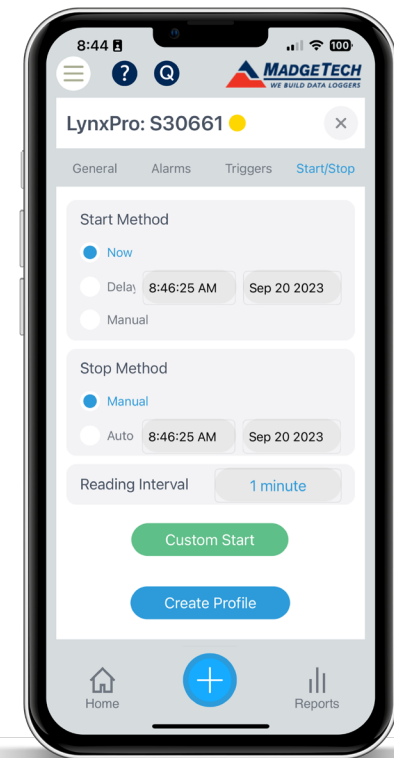
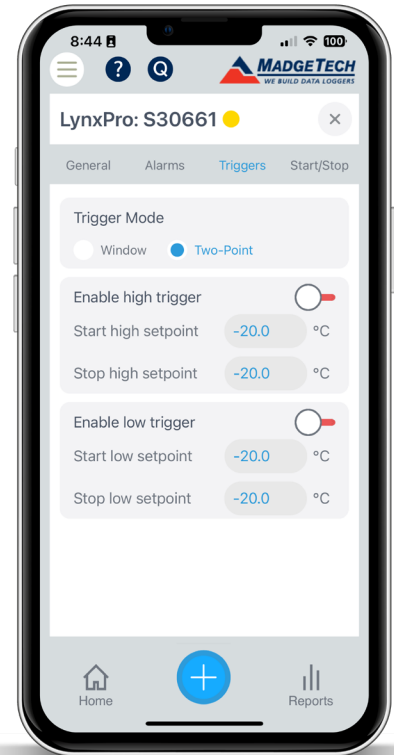
Automatic: Specifies the exact time and day the device should stop recording.

Reading Interval: Specifies how often a reading should be taken and can be set from one reading every one second to one reading every 24-hours.

Once you have configured settings, choose to either start your device, or save the settings to be applied to additional devices.

Custom Start: Applies the settings to the currently connected device.

Create Profile: Creates a saved profile of the current Trigger Settings and Start/Stop Settings so that they can be applied to additional devices. Once pressed, you will be prompted to name your profile.

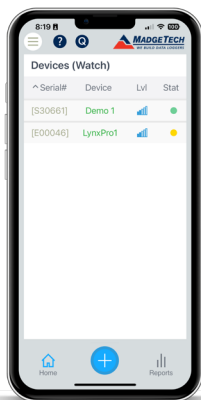


Quick Start with MadgeTech App

Install the MadgeTech Mobile App using one of the QR Codes below.



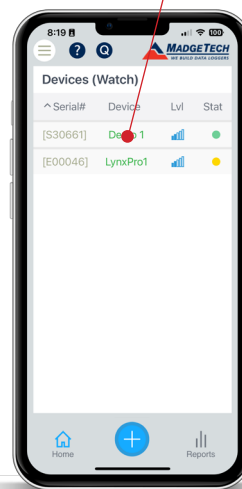
Once installed, open the MT Mobile App. By default, you're presented with the Home Screen. This screen will typically show devices which have previously been established or connected to the phone. To find your device, navigate to the Add Device page.



Ensure that Bluetooth is enabled on your smartphone, then press and hold the Bluetooth button on the LynxPro for 3-seconds until the Bluetooth logo appears in the upper left corner. When plugged into external power, Bluetooth will remain on.



A list of nearby devices will be presented. From this list, locate the LynxPro of interest and tap the desired device to add to your Devices/Home Page.



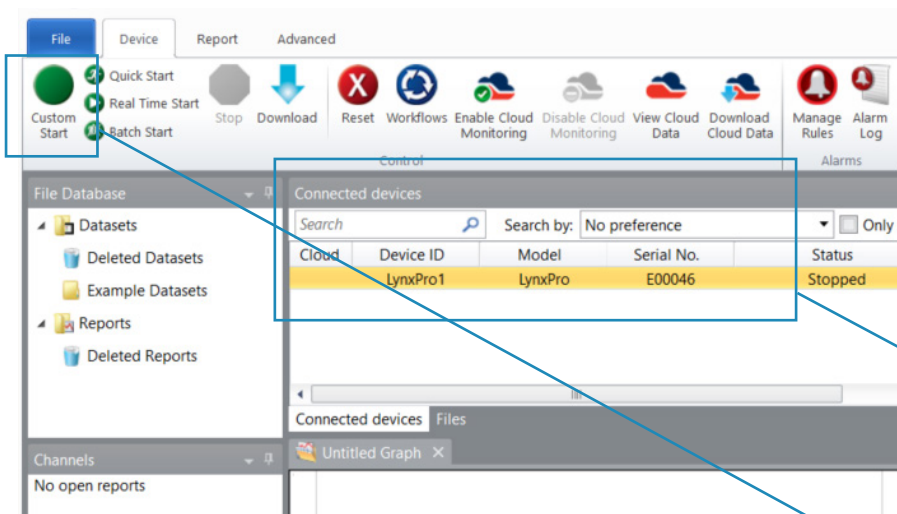
To connect to the device, click on it from the Devices/Home Page.

Once on the Device Summary Page loads, click on the Gear icon to launch the Device Settings. Follow the navigation to set Alarms, Triggers and Start/Stop modes. To learn more about device settings, visit page 8.

Once devices settings have been configured, press the Custom Start button to save settings to the device. If Manual Start was selected, press and hold the Play Button on the device for 3 seconds to begin recording.

Quick Start

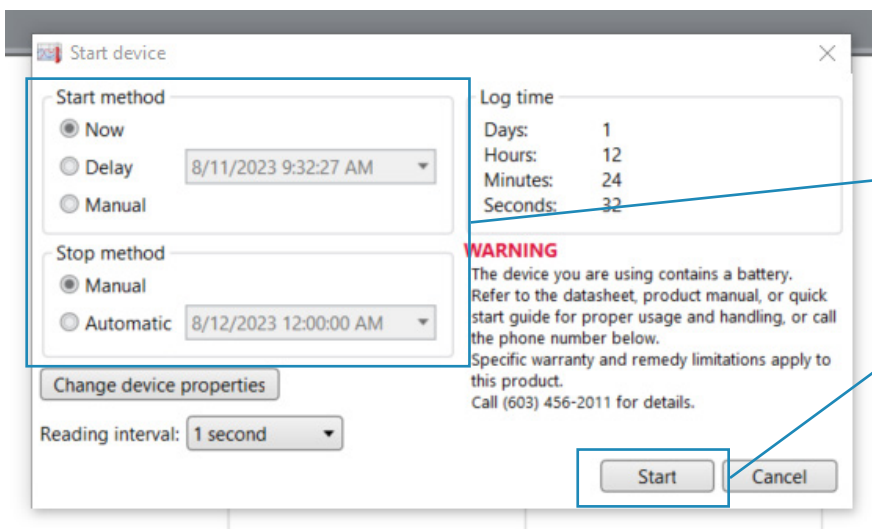
with MadgeTech 4 Data Logger Software



☐ Download the MadgeTech 4 data Logger Software from the MadgTech Website.

☐ Once installed, open the application and connect the LynxPro device with a Micro USB cable, ensuring Bluetooth is disabled. Once connected, the LynxPro should be listed in the Connected Devices panel.

☐ Once you see the device, select it and click Custom Start to launch the Start Device window.



☐ Select start method, stop method and reading interval.

☐ Once preferences are set, click Start to start the device. If Manual Start was selected, the Play Button must be held for 3 seconds on the device to start recording.



Battery Change Procedure

The LynxPro family of data loggers run on a CR2450 coin-cell battery, which is easy to find. These batteries are initially installed at the factory, but you can replace them yourself. The battery's status is shown on the LCD display. When you see four bars, it's a new or fully charged battery. As the battery's life decreases, you'll see fewer bars, and if there are no bars, you need to change the battery immediately.

If the battery completely runs out (discharges fully), the logger will stop recording data. However, any data collected just before the battery failed will be saved. Even with an empty battery, you can still download data if you connect the logger to a PC. In this mode, the PC powers the logger, enabling communication.

It's important to note that the LynxPro's battery can't be recharged. Once the device loses power, it will turn off.

Servicing the battery is easy with the battery access port located on the back of the LynxPro.



Either by pinching the finger impressions, or through using a coin, rotate the battery plug counter clockwise by 45 degrees. Remove the plug, and the battery becomes exposed.





Remove the old battery and discard to an appropriate recycling system. With a new, fresh, CR2450 battery, position the battery with the "+" symbol up towards you. Deposit the battery into the LynxPro. You may find some reluctance due to a tight fit. The battery should be snug but not require significant force. Once inserted/centered, apply the battery plug and rotate 45 degrees to lock the plug into place.





Tips and Troubleshooting

Unable to Find the Logger

- Check for the Bluetooth indicator on the logger. If that is not present, hold down the Bluetooth button on the device until the indicator appears (about 2 seconds).
- Make sure the logger is not connected to another app (phone).
- Move the phone closer to the device. The maximum distance between the phone and the logger should be no more than 20 feet (6 meters).
 - It is recommended that the phone should have 4 to 5 bars for signal level indicator (blue signal level indicator) for reliable downloads.
 - If the device has already been added to the watch list (Devices Home Page) it should appear there and the signal level bars will turn blue if the logger is detected. Otherwise...
 - Check the add devices page and tap on the device to add it to the watch list. Then tap on the logger in the watch list to connect.

Unable to Connect to the Logger

- Check the add devices list to see if the device is appearing there and tap on the device to move it to the watch list on the devices (home) page. Then tap on the device in the watch list in order to connect to the logger.
- If a device is removed from the watch list, either through sliding left on the watch list or removing the device directly on the Device main page, it will appear thereafter in the add devices list. This will reset the downloading indicator such that all of the data on the device will be downloaded by the app instead of resuming where it left off reading previously when the app reconnects.

Problem Downloading the Data

- If there is no new data available a notice is generated indicating that there is no new data to be downloaded.
- Periodically due to interference or marginal proximity to the logger, a download may not complete fully. Cancel the download and attempt to download again. The app will resume the download where it left off.

Anomalies – Alarms, Alerts and Warnings

- In the device main the Status/Alarms is nominally green indicating no reported issues. Otherwise the problems are color coded:

 Orange: Warning

 Red: Errors (Alarms and/or Alerts)

- Tap on the entry to show a list of what was discovered. Within the list tap on a color-coded entry for specific details and explanations.

Manual Start

- If the app is connected to the logger when manually starting the logger then tap on the refresh button on the main page, after starting the logger, to see the logger's updated status.

Power Issues

- A warning will be generated when a low battery is detected. It is recommended that the battery be replaced before attempting to download data.

USB/Bluetooth

- MT4 will not connect to the logger via the USB until the Bluetooth is turned off. Press and hold the Bluetooth button on the logger until the Bluetooth icon disappears (about 2 seconds).
- Refer to the MT4 user's guide for instructions on how to update the unit firmware.

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