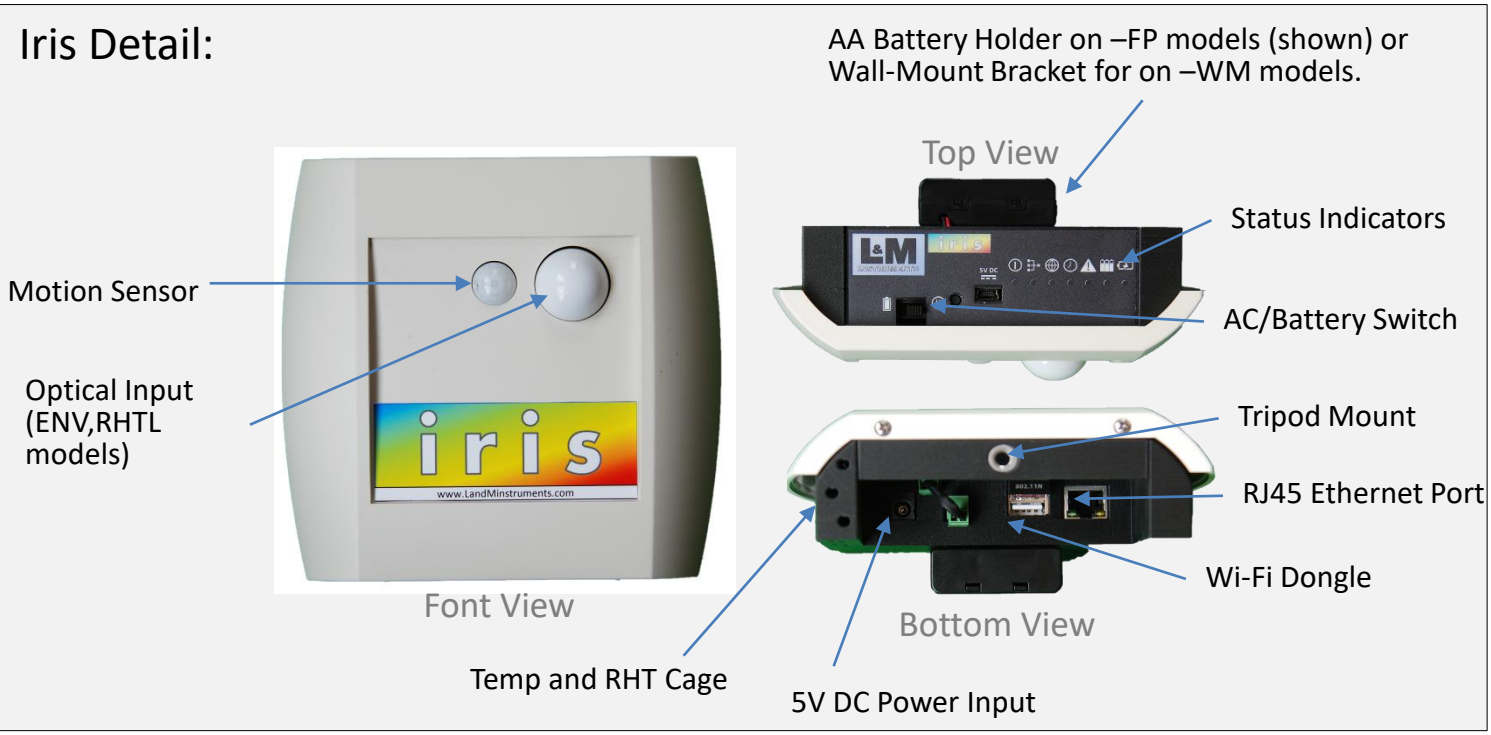
Iris Quick Start Guide

Iris Detail:

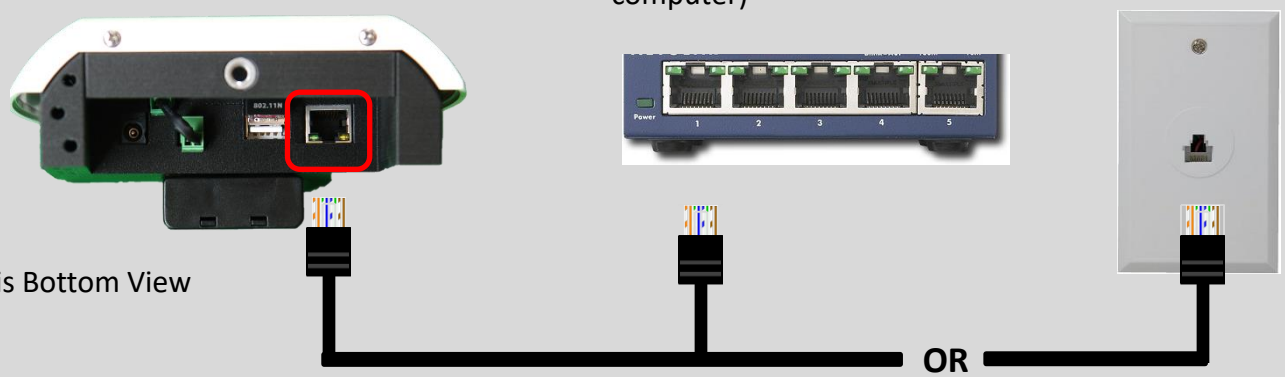


1. Create a Hardwire Ethernet Connection

- This can be the permanent connection, or a temporary connection used to program the Wi-Fi connection.

1a) Connect one end of the Ethernet cable to Iris as shown.

1b) Connect the other end to an Internet-connected Ethernet switch or wall outlet (not directly to a computer)



Note: An Ethernet-2-WiFi adapter is an alternative to provide Ethernet connectivity to Iris, but over a Wi-Fi connection. The IOGEAR GWU637 is and example of a device that can be used to achieve this.

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2. Select Wall Power and Power Unit

- For both –WM (Wall Mount) or –FP (Flex Power) units, the first step involves powering the unit with Wall Power such that the Internet connection can be established.

1a) Move Flex-Power switch to Wall Power.

Iris Top View

1b) Plug Iris in using the included Wall Power Adapter

Iris Bottom View

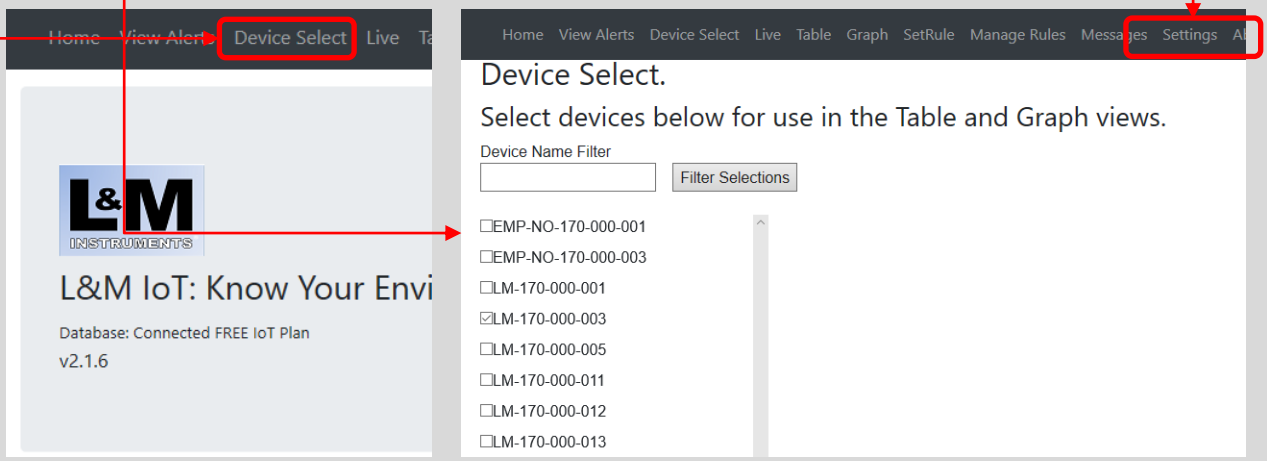
Wall Power Adapter

3. Confirm Internet Connection

- Confirm the 4 LEDs shown at the right are lit. *This will take up to 60 seconds.*

4. Access the L&M Continuous Monitor Cloud App from any Device

- Look for Email (including in Junk or Spam) from Microsoft: "You're invited to the L &M Instruments organization". Access the Continuous Monitoring app via the URL provided.
- If the hardwire Ethernet connection in Step 1 above is the final connection, setup is complete.
- If a Wi-Fi network is to be setup:
  1. Select Device Select from the cloud App top menu
  2. Select the device being configured (this will match the Serial # on the Iris side label) from the list (example below)
  3. Select Settings from the Top Menu to bring you the Settings page.



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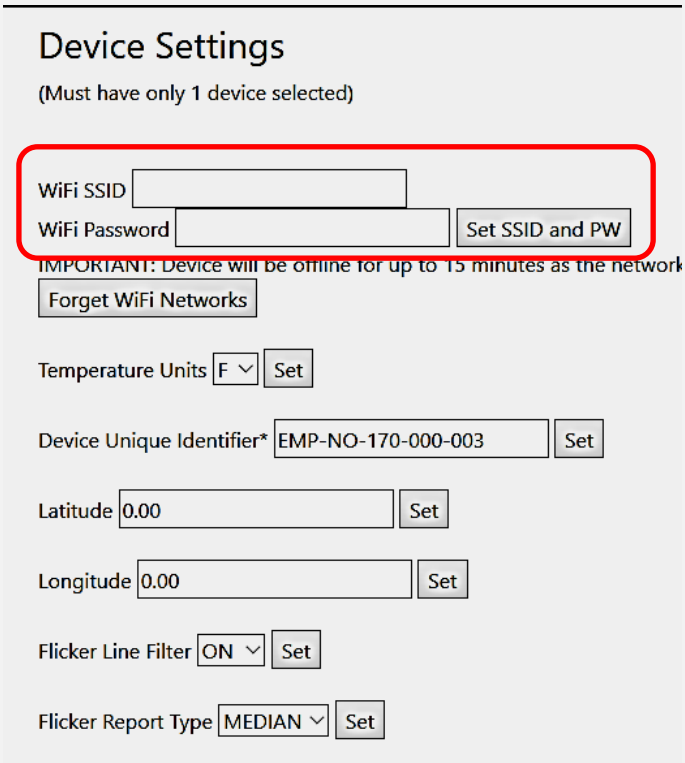
5. Wi-Fi SSID/Password Configuration via App

1. Within the Settings screen, scroll down to the Device Settings menu.
2. Enter the WiFi SSID and WIFI Password of the Wi-Fi network to be used permanently. Next select the "Set SSID and PW" button. If possible, watch the Iris LED's, which will blink to acknowledge this action.
3. Wait 10 seconds before removing the wired connection, followed by allowing another 2 to 3 minutes for the unit to reset and utilize the new Wi-Fi connectivity.

Note: Iris only supports SSID+Password PSK encryption. For more advanced enterprise security the unit has to be hard-wired to an Ethernet port. That port can be part of a corporate hard-wired network or a wireless router device.



6. Confirm Internet Connection

- Confirm the 4 LEDs shown at the right are lit.

7. Finished!

- See below for notes regarding flexible power (-FP units) as well as general cloud app usage notes.

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Iris Flex Power (-FP) Operation

Select Power Method (for –FP, Flex Power units)

- Flex-Power Iris units can run on either wall power (110-230, 50-60Hz) or battery power (3 AA batteries). Setup the proper power option below.

Wall Power

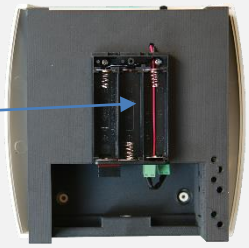
Move Flex-Power switch to Wall Power.

Plug Iris in using the Wall Power Adapter

Battery Power

Move Flex-Power switch to Battery Power.

Insert 3 AA Batteries within the battery holder. See the Battery Operation Note below.



Battery Operation Note

With battery operation, the unit turns on, samples and sends data to the L&M Cloud, and turns off automatically. The time between samples is set at the factory to 1 hour (default), 15 mins, or 5 mins. When the batteries are initially installed, the unit will immediately power up, sample, and power down. It will then stay on the fixed interval until the batteries run out of charge.

The unit can run on any standard AA batteries, but has been design to run best with Energizer Ultimate Lithium or Energizer Recharge (rechargeable) batteries. Typical run time is 1 week for a 5 minute interval, 2 weeks for a 15 minute interval, and 3+ weeks for a 1 hour interval for these batteries. Check web app “Messages” link for any low-battery warnings or replace prior to the prescribed battery run time based on the interval used.

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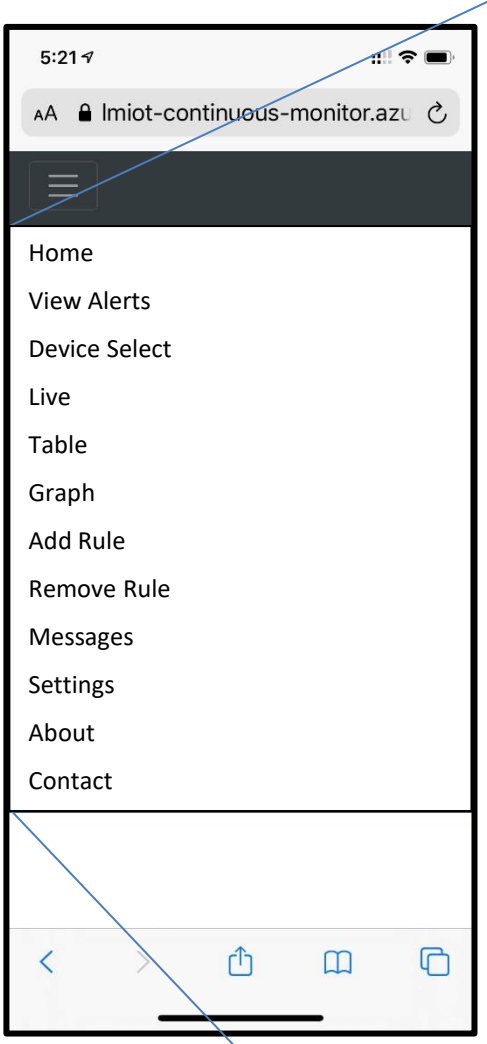
Iris Cloud App Usage Summary



Home: The main screen, including a summary of the last telemetry data and [optional] charts for up to 10 units.

View Alerts: Allows selection of a time-frame for viewing of alerts, found on all devices, as configured within the Add Rule and Remove Rule pages.

Device Select: Allows selection of one or more devices to include within table views (Table, Messages), the Graph page, the Live page and the Settings page.

Live: Allows immediate querying of a single device (Device Select must have one and only one device selected). The Live screen captures all available telemetry data in table form and, when available on the particular device, graph form.

Table: Queries the telemetry data, selectable by time-frame, for all devices selected within Device Select.

Graph: Charts all telemetry data, selectable by time-frame, for all devices selected within Device Select. If a single device is selected and the time-frame is 1d or greater, Hi/Low bands are graphed along with the line graph to indicate the minimum and maximum samples within the time-frame.

Add Rule / Remove Rule: Add or remove an alert rule.

Messages: A list of messages, including device startup and configuration changes, for all devices selected within Device Select.

Settings: A list of all account, user, and device settings. See the following page for more information.

About: A brief statement regarding the Cloud app and L&M.

Contact: L&M contact information.

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Iris Cloud App Setup Page

Settings Page Description

Setting	Usage
User Settings	These settings are available to all users.
Select Time Zone	This is the time zone that is used to display all tabulated and graphed data. This can be set on a per-user basis, with all data saved in the database as UTC.
Account Settings	These settings are only available to admin users.
Alert Email Destination	Enter up to 5 Email address destinations for Alert messages.
Device Settings	These settings are only available to admin users. For these settings to be managed a single device must be selected in Device Select.
WiFi SSID	The SSID (network name) of the Wi-Fi network used by the device.
WiFi Password	The password for the SSID above.
Temperature Units	Select F (Fahrenheit) or C (Celsius). Default = F.
Device Unique Identifier	The unique name of the device selected. *Usage Hint: Our Virtual Device Feature* The Device Unique Identifier can be re-programmed any amount of times for the same physical device, allowing one to track different areas or experiments by different devices name. The creates several virtual devices mapped, sequentially, to a single physical device. An example might be “Office 123”, “Pacific Conference Room”, “Cafeteria”, etc. The basic usage is as follows: • After data is collected over a period of time or within a specific area, use Device Select to select a single device for renaming • Withing Settings, set the Device Unique Identifier to something that identifies the next data collection time or space • Press “Set” to send the new identifier to the device • Return to Device Select, clear the Device Name Filter, and select Filter Selections to list the new device • Note that the old device is still listed. All of its data also remains in the database.

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Iris Cloud App Setup Page

Settings Page Description (Continued)

Setting	Usage
Device Settings	Continued from previous page
Latitude	A manually-entered latitude, used in conjunction with the Longitude field below to locate devices geographically. Note that this can be used as an additional identifier if desired but will always be listed as “Latitude”
Longitude	A manually-entered longitude, used in conjunction with the Latitude field below to locate devices geographically. Note that this can be used as an additional identifier if desired but will always be listed as “Longitude”
Flicker Line Filter	When on, flicker as well as SVM data will digitally remove 50Hz and 60Hz components. Default = ON.
Flicker Report Type	This setting controls the statistical method (AVG, Min, MAX, LIVE, MEDIAN) used to capture Flicker Percent, Flicker Index, Flicker Index, and SVM. Default = MEDIAN.
Capture Spectral Data	The –ENV device captures spectral data (350nm to 830nm, every 5nm) to calculate color temperature, melanopic lux, and other items. Setting this to ON captures the discrete spectral data in the database for later retrieval within Table view, allowing download and analysis. Setting this to “ON” also automatically creates a spectral graph within the Home page for this device. Default = OFF.
Collection Interval	The interval between data collections. Default = 15 minutes. This setting is only available for PREMIUM Tier IoT service contracts.
Account Storage Usage	These settings are only available to admin users.
Total Storage Used (MB)	This is the total amount of storage used by the database. For service levels that are governed by total storage, this number along with the functions below allow active management of the database size.
Delete up until this many days back	This allows the administrator to set the time frame related to the “Delete” button below.
Delete	Selecting this will cause the application to delete database records based on the setting within the “Delete up until this many days back” field.

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Iris Cloud App Setup Page

Settings Page Description (Continued)

Setting	Usage
Account Storage Usage	Continued from previous page
Delete Selected Device's Records	This will delete all the records for the all the selected devices. *Usage Hint:* After this is complete, return to the Device Select page and select Filter Selections with an empty Device Name Filter box to clear deleted devices.
Delete All Records on All Devices	This will delete all records within the database. New data will automatically start to repopulate for active devices.
Device Settings Detail	These settings are only available to admin users.
Settings + Value Table	If only one device is selected within Device Select, and that device is online, a table will be displayed with all the device settings. This information can be used for settings verification or troubleshooting.