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**DataLight II Software Manual**

**NetConfig**

**GETTING STARTED WITH WIRELESS LIGHT LEVEL MONITORING**

1. Attach the Antenna

The ILT5000 comes with an external antenna. Attach the antenna to the rear of the device.

**NOTE: Be sure to mount the antenna at the rear of the device, at the antenna symbol and not at the front “SMA” sensor input.**

Items 2-7 are also covered in the ILT5000 manual. For wireless information only, Please proceed to item 7 page 4.

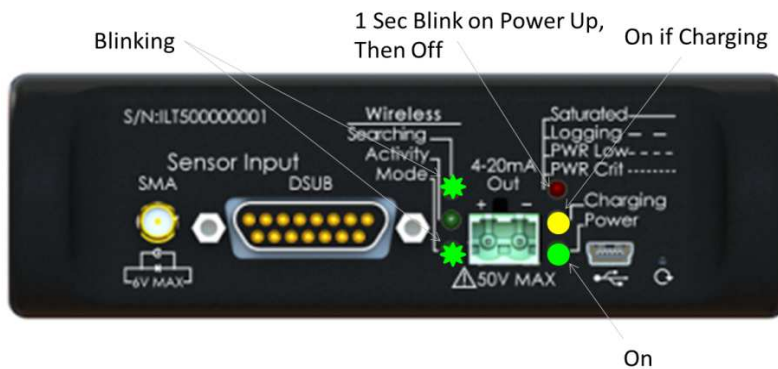
2. Power on your ILT5000

The ILT has a power switch at the rear of the unit. Flip this switch to the on position (the “up” position). If the internal battery has sufficient charge, this will light the green Power LED on the front panel. If the unit is not sufficiently charged, Step 3 below will power the unit and start charging the battery.

3. Connect your ILT5000 to a computer for setup.

Connect your ILT5000 to a Windows 7 or Windows 8 computer, laptop, or tablet with the included USB cable.

4. Verify the status indicators on the ILT5000



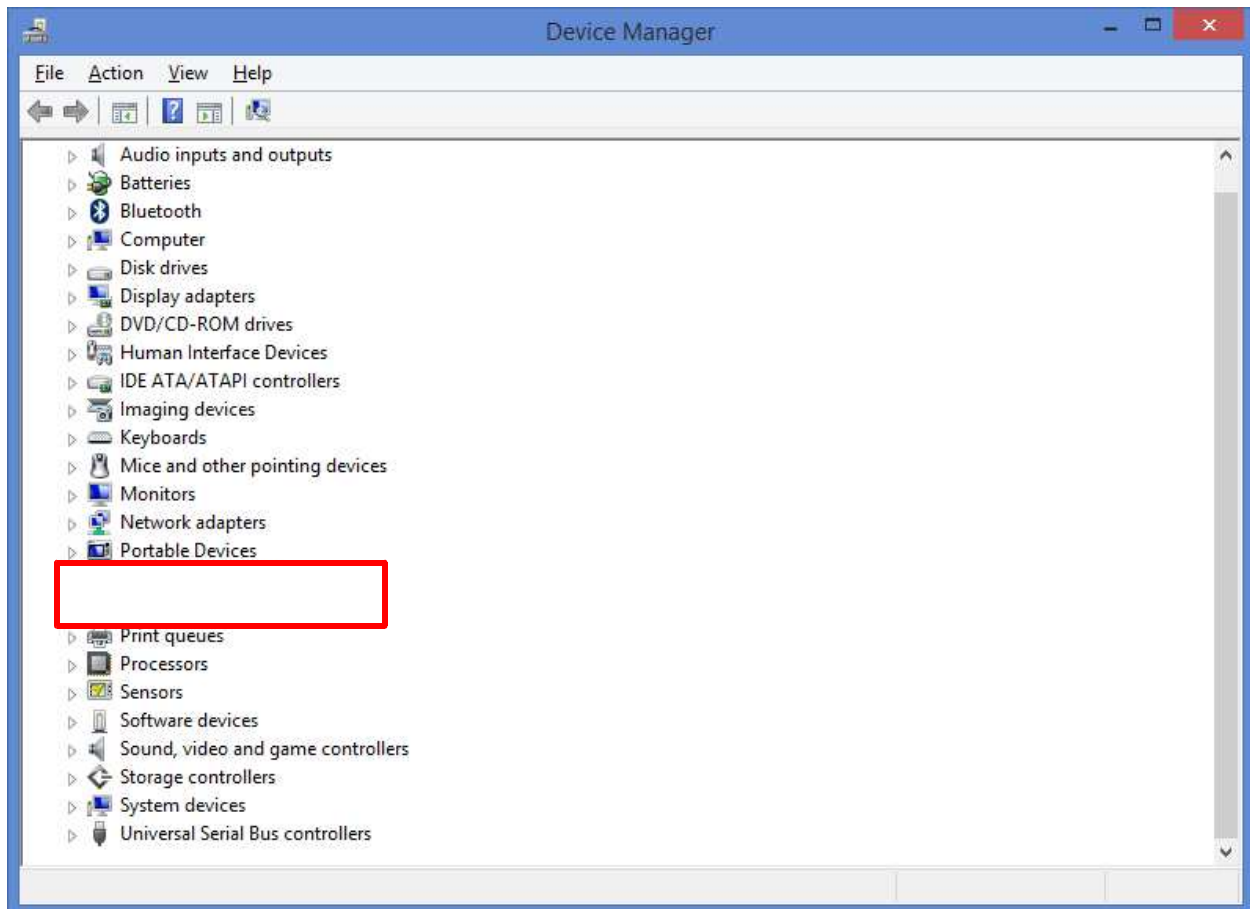
For an ILT5000 that has not yet been configured for wireless operation, the status indicator LED’s should be displaying the following:

Indicator LED	Display
Wireless: Searching	Fast Blink
Wireless: Activity	Off
Wireless: Mode	Slow Blink
Saturated/Logging/PWR Low/PWR Crit	1 Second Blink on applying power, otherwise turned off
Charging	On if battery requires charging Off if the battery is fully charged
Power	On

5. Confirm device driver installation

If this is the first time connecting the ILT5000 to the particular computer, USB drivers for the device will typically load automatically. If the drivers do not load, as they will need to be loaded manually, please install the drivers found at <http://www.ftdichip.com/Drivers/VCP.htm>. **Note: if the device is not recognized, Please see Appendix A of the ILT5000 manual for driver installation instructions.**

When the device is properly loaded, a “USB Serial Port” will show up in Device Manager under “Ports (COM & LPT).”



6. Load the DataLight II Software onto a Windows-based computer

The DataLight II software can be found at <http://www.intl-lighttech.com/support/software>.

The download will include a Windows Installer file with a \*.msi extension. When the msi file is executed, you are brought through a simple set of “Next”, “Next”, “Finish” steps.

**NOTE:**

The DataLight II Software and the ILT5000 device are not supported on Windows XP systems.

The DataLight II Software installer will attempt, if needed, to install the “Visual C++ Redistributable for Visual Studio 2012” from the Internet. If the computer is not Internet connected, these libraries will need to be installed manually from:

<http://www.microsoft.com/en-us/download/details.aspx?id=30679>

## 7. Run the “NetConfig” software

After installation of the DataLight II Software, an “ITL DataLight II” folder will appear on the Desktop. Within this folder is the NetConfig program. Double click on “NetConfig” to bring up the following screen:

The screenshot shows the NetConfig application window. The title bar reads "NetConfig". Below the title bar is a menu bar with "File" and a set of tabs: "Network Configuration", "Status", "Diagnostics", and "Advanced". The "Network Configuration" tab is selected. The main area contains several configuration sections: "Network Name / SSID" with a dropdown menu showing "roving1"; "Password / Security Key" with a masked input field; an "IP Address" section with a checked checkbox "Use DHCP to Automatically Acquire IP Address, Network Mask, and Gateway" and three input fields for "IP Address" (0.0.0.0), "Network Mask" (255.255.255.0), and "Gateway" (0.0.0.0); a "UDP Port" section with a text box containing "2000" and a note: "This value must be unique, among meters, to simultaneously access multiple devices from the same host."; and a "Save to File" section with a checked checkbox "Save IP and Port to File (for light monitoring apps to automatically find device on network)". At the bottom right are two buttons: "Refresh" and "Configure".

Configure the network configuration as follows:

The Network Name / SSID field defaults to “roving1”. This field contains a drop-down of all the wireless networks visible to the ILT5000. You can either select from the list or enter a network SSID that is not on the list (this may be the case where the network SSID is known, but that network is not currently visible to the ILT5000).

Set the Password / Security Key field as appropriate. This field will be left blank if the network is operating “in the clear”. The ILT5000 will automatically determine the appropriate security protocol (WEP, WPA, and WPA2 are supported).

Set the IP Address. This can either be accomplished by:

- a. Using DHCP, which will automatically fill in the IP Address, Network Mask, and Gateway during the configuration process.
- b. Manually entering the IP Address, Network Mask, and Gateway

**NOTE:**

The DataLight II Software does not currently support automatic discovery of ILT5000's. As a result, if using DHCP will result in IP Addresses that change frequently (this is dependent on your network policy) it is recommended that fixed/manual IP Addresses be used (check with your IT staff regarding policy for manually setting IP addresses).

[Optionally] Modify the UDP Port such that it is particular to the ILT5000 being configured, i.e. each ILT5000 configured has a different UDP Port. This UDP port number is used for sending information to the DataLight II Software applications. Different port numbers are required if multiple ILT5000's are to be monitored, simultaneously, with multiple instances of DataLight II Software applications (i.e. "Meter"), running on the same computer. For example the first ILT5000 may use UDP Port 2001, the second ILT5000 may use 2002, etc.

**NOTE:**

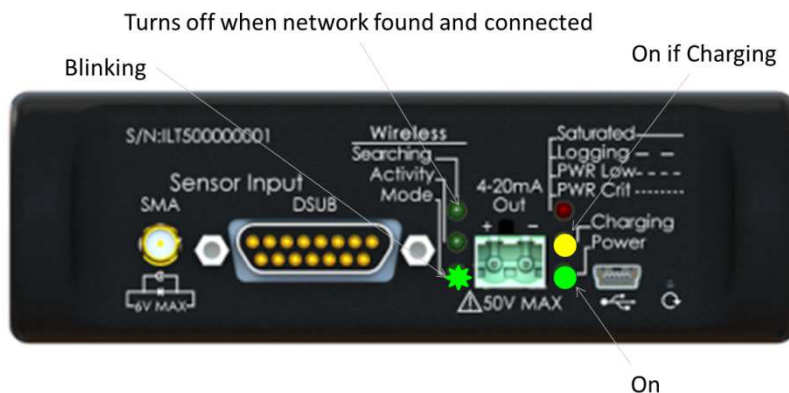
Ensure the UDP Port is not set to 2000. Some early ILT 5000 releases were set to this value by default, but this must be changed to a number other than 2000 for proper operation.

[Optionally, and by Default] Save to File. This feature will save the IP address and Port information to: Documents\ILT\Inventory\wireless device list.csv. This file is automatically accessed by the "Meter" program when looking for meters.

8. Click the Configure button on the Network Configuration tab.

This will configure the device save the IP and UDP Port information for use later by Meter.

If the ILT5000 was configured to connect to an existing wireless network in Step 6 above, the "Wireless: Searching" LED on the ILT5000 front panel should turn off within a minute, after the network is found and the IP Address is established.



9. Test the new connection

Move to the "Status" tab to see the new network settings including the Wireless Signal Strength.

Assuming the computer running NetConfig is connected to the same network as the newly configured ILT5000 meter, Move to the "Diagnostics" tab:

- Select Ping Light Meter from this Host
  - Because the meter was just configured, this might take 2 or 3 tries to establish the new network route and connection.

- Select Send “getdatetime” command to Light Meter
  - Upon success, the Meter returns the current date and time. An example of a successful results is: 02/25/2015 21:13:00 1424898780

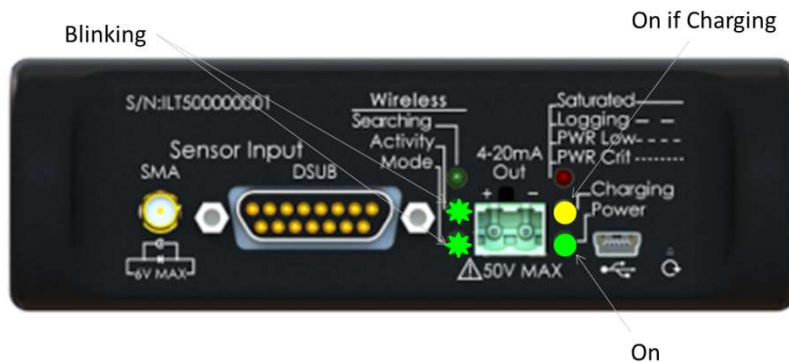
If any failures are detected, both diagnostics above will provide hints to remedy the issue. The second diagnostic may request a firewall exception to send and/or receive the UDP traffic.

10. Close the “NetConfig” application with File->Exit

11. Test the wireless connection with “Meter”

- Disconnect the USB cable between the computer and the ILT5000
- Run the “Meter” program from within the “ILT DataLight II” Desktop folder.
  - If you used the “Save to File” option within NetConfig, the “Meter” application will automatically find the ILT5000 IP Address and UDP port within this file.
  - If you did not use the “Save to File” option within NetConfig, you can either:
    - Enter the IP Address, UDP Port pair within Documents\ILT\Inventory\wireless device list.csv (it is best to use “Save to File” at least once establish the file and note the format of the data).
    - Create a “Meter” shortcut on the desktop and append the IP Address and UDP port information to the “Target” field within the “Shortcut” tab, i.e. Target: “C:\Program Files (x86)\International Light Technologies\ILT5000 Software Suite\ILT-Meter.exe” 192.168.1.100 2002

When “Meter” is running and wirelessly connected to the ILT5000 device, the Wireless: Activity indicator on the ILT5000 front panel should blink to indicate that there is data communication between the computer and the device.



For technical support please email [ilsales@intl-lighttech.com](mailto:ilsales@intl-lighttech.com) and we will gladly offer support with in 24 hours of receipt of email. Or by phone 978 818 6180 x216.