Bogart Engineering

WF-2030 Wireless Module

Installation Instructions

The WF-2030 is a 'man-in-the-middle' type of device that reads the constantly streaming data on the serial port of a TM-2030 battery monitor and publishes this data on a web page. Any computing device equipped with WiFi or networking capability and a web browser may access this page.

In addition to battery bank related information, the WF-2030 publishes pages that allow a user to configure the TM-2030, set operating modes for the WF-2030, and control other functions.

Power Connection:

The WF-2030 draws the power it needs to operate from terminals **B1 & G1** of the TM-2030 whose datastream it monitors.
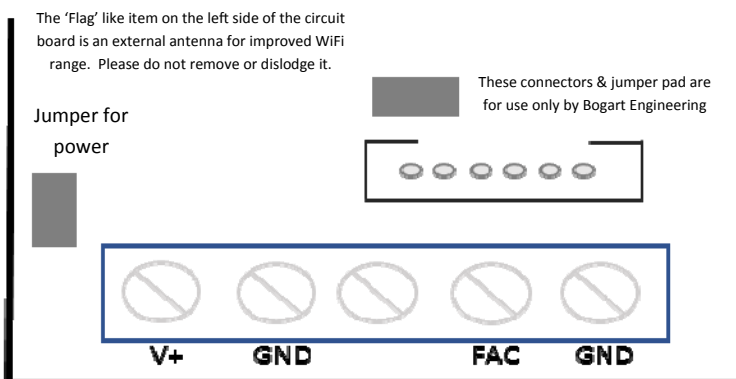
Connect terminal **B1 to WF-2030's V+** terminal and **G1 to GND** terminal using the wiring provided or any suitable piece of wiring. No fuse is needed on this connection, provided that the TM-2030 is protected by a fast blow 1 Amp fuse. Prior to making these connections, turn off power to the TM-2030 monitor by removing the fuse from its fuse-holder.

Turn **ON** the WF-2030 by installing the jumper provided on the jumper pad on the left side of the main terminal block. The WF-2030 is designed to be powered ON all the time. To turn it off, remove the power jumper.

Data Connection:

Connect the WF-2030's 'Phone' socket (either one) to the TM-2030's phone socket using the cable (provided) or similar 2-line straight modular cord. Do not use a crossover type of cable to connect the two units together.

If you have a SC-2030 Solar Charger, connect its crossover communication cable to the free phone socket on the WF-2030.

The 'Flag' like item on the left side of the circuit board is an external antenna for improved WiFi range. Please do not remove or dislodge it.

Jumper for power

These connectors & jumper pad are for use only by Bogart Engineering

V+   GND   FAC   GND

Installation Instructions, continued

Operation:

When a WF-2030 is first powered ON, it will setup a WiFi accesspoint (AP) named 'WF2030'. Connect to 'this accesspoint, and, using a browser, navigate to http://192.168.4.1. The main page served by the WF-2030 offers links to view TM-2030 data, view/change TM-2030 Parameters and stored History data, and WiFi configuration.

Once on the main page, select 'Setup' and go to the "WiFi Setup". Select either **Access Point (AP)** or **Station** mode.

If you select **AP mode**, we recommend changing the name of the accesspoint to something else and assigning a password. Restart the WF-2030 with the power jumper.

If you select **Station mode**, provide the name & password of an existing accesspoint. The WF-2030 will join the network of devices on this accesspoint and will be identified by the name 'wf2030' on the list of clients of the accesspoint. Depending on the make/model of your accesspoint, you may be able to connect to the WF-2030 by typing "http://wf2030 in your browser's address bar.

If you desire to reset your WF-2030 to factory settings, simply touch the screw tops of **FAC** and **GND** terminals with a piece of wire for about 5 seconds and then remove the wire. Then, using the power jumper, restart the WF-2030. This will erase any user configured settings and restore factory settings.

It is possible to configure an internet connected router (or AP) so that a WF-2030 operating in the Station mode may be accessed from anywhere in the world. Please use caution when using this mode of operation. Understand and accept any risks this may pose. Bogart Engineering is not responsible for any damage or loss incurred when the WF-2030 is used in this mode.

Special comments on History & % Full data:

TM-2030 monitor records five days worth of battery & charge/discharge cycle related data in its EEPROM. The WF-2030 reads the EEPROM and displays the data on the History pages. Due to the nature of how data for H1 and H2.1 are computed , the data displayed by the WF-2030 may differ (lag) from the data displayed by a TM-2030 on its display.

When initially powered, a TM-2030 will display '- - -' for % Full, until it discovers a fully charged condition. A WF-2030, however, may display 100% during this period and will 'count up' as the batteries are being charged. Once the TM-2030 recognizes a fully charged condition, both WF-2030 and TM-2030 will reset to 100%. Until this reset occurs, the data for % Full reported by the WF-2030 is incorrect and should not be relied on.

Warranty: The WF-2030 is covered by our 3 year warranty, provided that it has not been mis-used and abused. To be eligible for this warranty coverage, the item must have been purchased directly from us, or, from one of our authorized distributors. A proof of purchase is required to establish warranty claims. The warranty does not extend to used items purchased from private resellers and auction and classified ads websites. Contact us thru our website and obtain a return authorization prior to shipping an item to us.