BRG Wi-Fi Analog Battery Powered Clock Configuration and Operation

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Important – Use only one cell phone, PC or tablet at a time to configure Wi-Fi devices. If others have been used and they are in the immediate area, turn them off or place them in airplane mode so that they cannot access the Wi-Fi device being configured.

First time installation:

1. The target network must have DHCP automatic network configuration enabled. Wi-Fi devices may be assigned a fixed IP address later using the IP reservation method on the network.
2. Move the switch on the top of the clock movement to the “Config” position and insert the batteries.
3. The OLED display will show various commands for the first 20 seconds. After 20 seconds the OLED display shows the IP address of 000.000.000.000 and the MAC address. If the IP address is not zeros, then move the switch to “Run”, wait one second, then move the switch back to “Config”. When “Set to Defaults & Enable AP Mode” displays, move the switch to “Run”, wait one second, then move the switch back to “Config”. After 20 seconds, the IP address should be reset back to all zeros.
4. Use an iOS or Android smart phone. Go to Settings in the smart phone and search for a Wi-Fi device with the name “nwts-conf”. If the device does not appear in the list, refresh the list again. If the phone ask for a password, enter config-me, then refresh the list.
5. Select “Configure Wi-Fi”.
6. Select the desired Wi-Fi network.
7. Enter the password and select “Save”.
8. Move the switch to “Run”.

Replacing batteries:

If the clock has stopped or the second hand is double stepping, remove all four batteries. Insert new USA made Lithium batteries. The clock will attempt to acquire an NTP time update and move to the hands to the correct time.

Web Server Clock Configuration

The BRG Wi-Fi clock’s time display rules are normally configured at the factory for the customer’s location. However, a web server is available if the time display rules need to be changed.

Enter the IP address displayed on the clock’s LCD screen into Internet Explorer or other browser on the phone or PC. A prompt will appear requesting a user name and password. This prompt may appear behind the browser screen, so you may need to minimize or move the browser to see it.

Enter “admin” for the user name and “nwts” for the password and select OK. If the page does not appear right away, try refreshing the page or use a different browser.
If the web page appears, but the fields are fill with X's, refresh the page, or try a different browser.

The first web page displays various details about the web interface. Click on the “Advanced” button to configure various parameters.

To configure the time zone offset from UTC time, check the “Enable time zone support” checkbox.

Entered the number of minutes, positive or negative, offset from UTC. For example, USA Central Standard Time is -360 minutes.

To configure the Daylight Saving Rules, check the “Enable Daylight savings” checkbox. If daylight saving time is not used, leave this box unchecked.

Select the desired rules for start and end of daylight saving time.

Entered the number of minutes, positive or negative, offset from UTC when daylight saving time is active. For example, USA Central Daylight Time is -300 minutes.

Note that the checkbox for debugging is for factory use only. Checking this box will disable time updates to the clock. Select “Save” button.

Wait 5 seconds, then move the switch on the clock from “Config” to “Run”.

If the clock hands have stopped moving, press and hold the “Rec” button on the back of the clock movement for 4 seconds, then release. The clock should receive a time update in about ten seconds and move the hands to the correct time.

**Mode Switch Commands** – Mode the switch to “Config”. When the selected command appears on the OLED screen, move the switch back to “Run”. If no command is needed, wait until the time is displayed (20 seconds) before moving the switch back to “Run”.

**Enable AP Mode** – The clock will be placed in access point mode. Go to “First time installation” for instructions to configure the clock to the network.

**Reset Password & Enable AP Mode** - The user password will be reset to the default. The clock will then be placed in access point mode. Go to “First time installation” for instructions to configure the clock to the network.

**Set to Defaults & Enable AP Mode** - The user password and all parameters will be reset to the defaults. The clock will then be placed in access point mode. Go to “First time installation” for instructions to configure the clock to the network.

**Disable Sec Hand from 6 pm to 6 am** – The seconds motor uses ten times more battery power than the hour/minute motor. The seconds motor can be disabled during the night to extend the life of the batteries. Repeating this selection will toggle the seconds motor between enabled and disabled.