RokTempo User Manual



Table Of Contents

What is the RokTempo?

Quick Start Guides

Using the RokTempo with the Drum Clip Accessory Adapter (DCAA):

Using the RokTempo directly mounted to the drum head:

Features:

How does it work?

User Changeable Settings:

Modes Available:

Additional Features :

Specifications:

FCC Compliance Statement

Battery Installation:

Warranty : 180 days

Refund Policy : 30 days

What is the RokTempo?

• A self contained battery powered electronic tempo monitor that attaches to a drum and displays Beats Per Minute (BPM) as you play.

Quick Start Guides

Using the RokTempo with the Drum Clip Accessory Adapter (DCAA):

- 1. Mount the Drum Clip to the rim of the drum. Follow this link for a video showing how to install the Drum Clip : <u>https://www.youtube.com/watch?v=pLvLSVJ0U9A</u>
- 2. Remove the Velcro piece with the clear protective backing from the back of the RokTempo, remove the clear backing and apply it to the top portion of the Drum Clip.
- **3.** Attach the RokTempo to the Velcro on the Drum Clip and press firmly to engage the mating Velcro pieces.
- 4. The RokTempo is shipped in powered down mode. To Power up, press and hold the control button for three seconds. "Pu" will be displayed for a moment then three hyphens will be displayed indicating the unit is ready to use.
- **5.** Rotate the control knob to adjust the threshold trigger to the desired sensitivity, the default is 20, adjust it to 15. This is a good place to start when using the drum clip.
- **6.** If the unit goes to sleep, (blank display) it can be woken up by hitting the drum, tapping on the unit, rotating or pushing the control knob.
- 7. To put the unit in power down mode (turn off), press and hold the control knob for two seconds. The display will blink "Pd" three times indicating Power down mode has been entered. In power down mode not only does the battery life get extend it also prevents wake up by a hit, tap or rotation of the control knob.
- Follow this link for a video showing the demonstration of how to use the Drum Clip with the RokTempo : <u>https://www.youtube.com/watch?v=tovRDxJNR20</u>

Using the RokTempo directly mounted to the drum head:

- 1. Remove the Velcro piece with the clear protective backing from the back of the RokTempo, remove the clear backing and apply it to the drum head near the rim.
- 2. Attach the RokTempo to the Velcro on snare drum, firmly pressing down to fully engage the velcro.
- 3. The RokTempo is shipped in powered down mode. To Power up, press and hold the control button for three seconds. "Pu" will be displayed for a moment then three hyphens will be displayed indicating the unit is ready to use.
- **4.** Rotate the control knob to adjust the threshold trigger to the desired sensitivity, the default is 20 and is a good place to start with the RokTempo mounted to the drum head..
- **5.** If the unit goes to sleep, (blank display) it can be woken up by hitting the drum, tapping on the unit, rotating or pushing the control knob.
- 6. To put the unit in power down mode (turn off), press and hold the control knob for two seconds. The display will blink "Pd" three times indicating Power down mode has been entered. In power down mode not only does the battery life get extend it also prevents wake up by a hit, tap or rotation of the control knob.

Features:

- Small enough to attach to a snare drum.
- Powered by one CR2450 coin cell battery, sleep mode entered after 30 sec of no activity.
- Power down mode to extend battery life and prevent wakeup.
- Self contained, no external sensors needed.
- Adjustable sensor threshold trigger, sensitivity can be set to pick up hits from brushes.
- Ready to use right out of the box using pre-programmed default settings.
- Built in battery level monitor, if the battery level falls too low for normal operation it will let the user know by displaying "bLo".
- Adjustable average number of beats. Depending on the selection, the RokTempo will average between 2 - 8 beats before starting the averaging process again.
- User selectable 1x 6x BPM reading.
- Adjustable LED brightness.
- Additional settings listed in the User Changeable Settings section.

How does it work?

- The RokTempo has an internal sensor that senses vibrations from the drum and converts these vibrations to BPM as a repeated pattern is played on the drum.
- Any time three hyphens are displayed this indicates the unit is ready for the first beat.
- Three lit decimal points indicates the first beat was detected. The remaining beats will display the actual BPM.
- When a beat is detected the decimal points will light up for a brief time and the BPM is updated to the latest measurement.
- If no activity is detected after 30 sec the RokTempo will enter sleep mode, it can be woken up by hitting the drum, tapping on the unit, rotating or pushing the control knob.

User Changeable Settings:

- The unit comes with default pre-programmed settings and can be used right out of the box. But the user can change these settings as noted below.
- **Tip :** To prevent the push button from causing a trigger, set the threshold to 70 or higher. Once User settings have been changed set the threshold to it's previous setting.
- On the top of the unit is a dual function control knob. 1) Push button for selecting user options and powering the unit on or off. 2) Rotating the control knob for

adjusting the settings. Note : If the button is pressed and held for two seconds or more, the unit will be **P**owered **D**own. Press and hold the button for three seconds will power up the RokTempo indicated by "**Pu**" on the display.

• Modes Available:

- Set Threshold. Just turn the control knob (pushing the button is not required), you will see the value increase or decrease. The higher the value decreases the sensitivity, the lower the value increases the sensitivity. Tap the unit or hit the drum to lock in the setting. Default value is 20, user setting ranges from 10 127.
- To change any of the following settings, **pushing** the button is required
 - First Press (User Mode 1) = Set Avg Beats 1,2,3,4,5,6,7,8. Default is 1.
 - Indicated by the first digit's (left most) decimal point for a brief time. ".____"
 - Rotating the control knob will change the value from 1 8. Press the button again to lock in the change.
 - Note : After 20 sec of no activity, Avg Beats will always be set as the first user mode.
 - Next Press (User Mode 2) = Set BPM Multiplier from x1 x6.
 BPM is multiplied by the BPM multiplier to get the actual BPM.
 Default is x1.
 - Indicated by the second digit's (center) decimal point for a brief time. "_._ "
 - Rotating the control knob will change the value from 1 to 6. Press the button again to lock in the change.
 - Next Press (User Mode 3) = Set Sensor Delay, 75 200ms.
 Default is 100ms (ms = millisecond = thousands of a second).
 - Indicated by the third digit's (right most) decimal point for a brief time. "___."
 - Rotating the control knob will change the sensor delay from 75 to 200ms in 25ms increments. Press the button again to lock in the change.
 - On some really hard hits double triggering can occur with certain drums. Adjusting the Threshold level higher can help eliminate this condition but will reduce the sensor sensitivity. To keep the desired sensitivity, increase the length of the sensor delay greater that the default value of 100.
 - The amount of delay will impact the maximum BPM measurement. For example, a delay of 100ms will limit the max BPM to ~200. A 200ms delay will limit the max BPM to ~140.

- Next Press (User Mode 4) = Set LED Brightness, 10 100.
 Default is 40.
 - Indicated by the second and third digit's decimal point for a brief time. "_.."
 - Rotating the control knob will change the value from 10 to 100. Press the button again to lock in the change.
 - Note : Values over 60 will shorten the battery life.
- Next Press (User Mode 5) = Display the Battery level remaining.
 - Indicated by the first and third digit's decimal points for a brief time. "._. "
 - Displays 20 100, this number represents the percentage (20 to 100%) of remaining battery life.
 - Rotating the control knob in this mode will display/set three additional features. The first clockwise rotation click will display the firmware revision x.xx, the next rotation click will display "LbF" which stands for Last average beat OFF (This is the default), The next rotation click will turn display "Lbn" the Last average beat on. See below the detailed description between these modes.
 - Note : During usage if the battery falls below 20%, it will display "bLo" for a brief period before resuming operations. Letting the user know the CR2450 coin cell battery needs replacing.

Note : While one of the above settings is in progress the power down function is not available.

- Power Down mode (Turn off) : Press and hold the control knob button for two seconds to enter the Power Down mode. When the unit is in power down all modes are inactive.
- Exit Power Down Mode (Turn on): Pressing the control knob for three seconds exits the power down mode and returns to normal mode while retaining all of the user settings.

Additional Features :

- Last Average Beat BPM Multiplier Off ("LbF") When this feature is selected during User Mode 5, and User Mode 1 is set to Average beats > 1 then every beat will display the BPM times the BPM multiplier. This mode is the default setting.
- Last Average Beat BPM Multiplier On ("Lbn") When this feature is selected during User Mode 5, and User Mode 1 is set to Average beats > 1 then only the last beat averaged will display the BPM times the BPM multiplier.

Note : The settings listed above are retained even when the battery is removed.

Specifications:

- Sleep Mode : Entered after 30 seconds of no activity.
- Operating Voltage:
 - $\circ~$ Battery : One CR2450 coin cell. Battery life = ~1 year.
- BPM Range : 1 240
- Accuracy +- 1 BPM
- Display : Seven Segment LEDs
- Enclosure Size : L : 2.36 x W : 1.38 x H : 0.79"

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party : **RFJ Industries LLC** 6606 FM 1488 Ste 148-674 Magnolia, Tx 77354 <u>info@roktempo.com</u>

Product Name : RokTempo Model Number: RT001

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiveris connected.

-Consult the dealer or an experienced radio/TV technician for help.

Battery Installation:

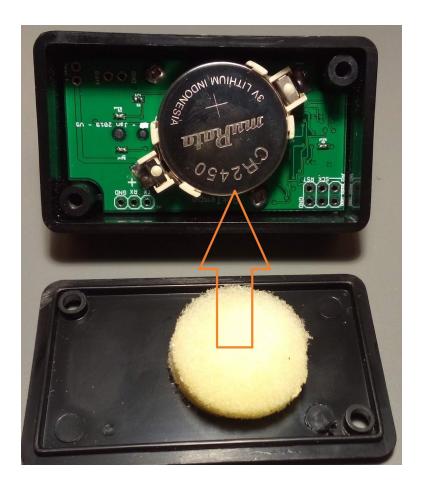
Installing the battery : When installing the battery, angle it towards the two prongs in the battery holder.



Then press down and snap into place.



• When replacing the back cover make sure the foam on the cover is aligned with the battery. This prevents the battery from becoming dislodged from the battery holder during use.



- To prolong battery life, put the **RokTempo** in Power Down mode by pressing and holding the control knob for two seconds. Pressing the button again will power the unit back up.
- After several hours of use the Velcro can become disengaged and some hits could be missed. if this happens either lower the threshold or reseat the **RokTempo** to the drum.

Warranty : 180 days

The RokTempo is warranted to be free of defects 180 days from the date of purchase. Please send an email to **info@roktemp.com** and an address will be provided for the return. Please also include your order number.

Refund Policy : 30 days

If for any reason you are not happy with the RokTempo within 30 days from the date of purchase return it for a full refund. Please send an email to **info@roktemp.com** and an address will be provided for the return. Please also include your order number.

Visit **roktempo.com** for more information.

For questions and comments email us at : info@roktempo.com

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Youtube : https://www.youtube.com/channel/UCaT31_rTIIUVSxmMMN8wdMQ

Version 1.7