



ITEM# WRL-CHNK2
ITEM# WRL-CHNK2E
powered by 

Congratulations on your purchase of the Chinook Optical Tachometer G2. The Chinook is designed and manufactured in Canada with the state of the art micro-controller technology. Its universal design enables it to determine the rotor blade speed in Revolutions Per Minute (RPM) of any R/C helicopter model with an aid of a large visual viewing window and LCD screen. It's uses high quality robust components that guarantees the accuracy and optimization of the head speed in any condition.

Please read the entire manual before proceeding.

Features:

- Reads a wide range of rotor head speed from 500 RPM to 3300RPM (2 blade system). Up to 4200 RPM (3334/2500 RPM for 3/4 blade system) for the Elite version.
- High accurate RPM readings within 10 RPM.
- Easy to use dial to adjust the RPM speed with on board memory to save RPM settings.
- Large viewing window for clear visual of model's rotor blades.
- Low battery unit indicator.
- Operates on one single 9V battery (sold separately) with battery compartment.
- On/Off power rocker switch.

Package Contents:

- Chinook Optical Tachometer G2 unit
- User Instruction Manual

Hardware Setup:

1. Switch the I/O power switch to the 0 (OFF) position. Open the battery compartment located on the back of the Chinook unit by sliding the compartment lid towards the bottom of the unit.
2. Install a 9 volt battery (sold separately) to the enclosed battery clip located in the battery compartment and gently place the 9 volt battery inside. Ensure that the 9 volt battery is sitting comfortably inside the compartment to avoid the battery compartment lid of closing improperly. Replace the battery compartment lid by carefully sliding the lid back on.
3. Your Chinook Optical Tachometer G2 is ready for use.


Operation:


1. Turn on the Chinook Optical Tachometer G2 unit by switching the on/off rocker switch located at the top of the unit to the on position I.
2. Wait for the rotating disk to wind up and the greeting message on the LCD will disappear.
3. The Chinook will normally default to 2500 RPM if the device has been used for the first time. If no activity is given to the device within 2-3 minutes, then the device will go into "Idle" mode. The LCD screen on the unit will display "Idle". By pressing the dial switch located on the front of the device will cause the device to wake up and it will resume to the last RPM setting.
4. Sliding the dial switch either up + or down - will adjust the Chinook's RPM speed reading and the rotating disc will adjust accordingly. Sliding it upwards will increase the RPM speed while sliding it downwards will decrease the RPM speed. By holding the RPM dial speed up or down for more than a few seconds will increase the speed of the increments of the RPM adjustment for a faster response.

Operation Cont'd:


5. Use the RPM dial to match the Chinook's RPM reading to the helicopters RPM head speed while viewing through the viewing window on the device. While viewing through the viewing window directed at the R/C helicopter models rotating blades, the Chinooks LCD screen will display the actual RPM speed of the helicopter's rotor speed. The Chinook will function with right or left hand rotation rotor systems and with most multi-blade systems.
6. (For Elite version only) Press and hold on the dial switch and release it once the LCD display flashes the rotor blade number and this will scroll the RPM readings for either a 2, 3 or 4 blade system. Repeat to scroll through the other blade counts.
7. To save current RPM setting, press and hold on the dial switch until the LCD display's flashing rotor blade number has passed and displays "RPM saved". Now every time the Chinook powers on, it will default to your saved setting.
8. When the Chinook is not in use, it is recommended turn off the power with the I/O switch to the off position to prolong battery life. A low battery strength indicator will be displayed on the second line of the LCD screen as LOBAT. This indicates that the 9V battery should be replaced or recharged.

Tachometer RPM Reading Guidelines:

 The dial switch increments and decrements the RPM speed by 10 RPM. If the R/C model blades drift very slowly from the window readout, the LCD screen will display the actual RPM reading within 10 RPM.

 To achieve the correct RPM rotor blade speed of your helicopter, it is recommended to initially set the Chinook RPM setting above the assumed hovering RPM speed of your helicopter. Then you will look through the Chinook's viewing window and decrement its RPM speed until you see the same number of rotor blades rotating very slowly. For Elite version, please adjust the Chinook for either 2, 3 or 4 blade system to match your model's blade count before attempting to achieve the correct RPM reading.

NOTE: When achieving the correct RPM reading for either a 2,3 or 4 blade system helicopters, it is possible to see a blurred image of your model's rotor blade at half of the actual RPM speed. In this case, try increasing the Chinook's RPM setting to approximately double until you see a clearer image of the rotor blade, the LCD screen will then display the actual RPM reading. On average, 2 blade electric helicopters have an approximate hovering RPM speed of 3000-3300 RPM and nitro/gas helicopters have RPM speed of 2000-2500 RPM.

 Working in close proximity to the R/C helicopter will result in visual distortion of the rotor blade causing a "boomerang" appearance which does not affect accuracy.

TROUBLESHOOTING:

Q: Why does my LCD screen display LOBAT?
A: This indicates that the 9V battery strength is low and needs to be replaced or recharged.

Q: The Chinook Optical Tachometer rotary disc does not rotate?
A: The rotary disc can sometimes stop if the unit is violently shaken, in this case turn the unit power off and back on; then the disc should be able to start up properly. Or the battery voltage could be low and should be replaced.

Q: The RPM display is not displaying a correct RPM speed?
A: The battery voltage could be low which will affect the RPM readout accuracy. Please replace the 9V battery.

Q: The rotary disc is spinning but the LCD screen is very dim or not on?
A: The 9 volt battery could be low should be replaced or recharged if it's a rechargeable battery.

Q: The RPM display is displaying half the value of the correct RPM speed?
A: This is possible to see a slightly blurred image of the rotor blade at half of the actual RPM speed due to visual optical illusion. Increase the Chinook's RPM setting by approximately two times until you see a clearer image of your model's rotor blade for the actual RPM reading

Q: When do I know if I've got the actual RPM reading?
A: If the helicopter model's rotor blades (# of blade to match model's blade) drift very slowly from the Chinook's viewing window, the LCD screen will display the actual RPM reading within 10 RPM.