



User Manual

Thank you for purchasing our state-of-the-art Electronic Rotation Counter™ (ERC). This is the only system available to the commercial and consumer markets for measuring yarn on a skein-winder in yards, meters, and rotations. But even if we did have competition, our ERC would still be the best solution!

This User Manual will describe the unit's basic functions and features and help you to get the best performance and use from the ERC. Please review this manual completely so that you can fully appreciate and understand what the ERC can do.

Configuration

The ERC can be procured in two ways: first, it may be bundled with our Skein-winder, and secondly, it can be purchased separately.

When it is included with the Skein-winder, it is intended to be mounted on the metal bracket on the top of the Skein-winder. When you assemble your Skein-winder, the ERC will be packaged in a separate padded envelope and will not be mounted on the bracket as the unit comes from the factory.

Simply remove the ERC from its packaging and attach it to the metal bracket on the top of the Skein-winder. Insert the threaded studs on the back of the ERC housing through the two metal bracket holes on the top of the skein-winder. Then attach the washers and lock nuts to securely hold the ERC on the bracket.

You will insert the silver plug on the short cable that protrudes from the top of the skein-winder into the jack marked "ERC" on the ERC housing (right side of housing). Make sure you fully press the plug into the ERC. Sometimes, it seems to go in only halfway, so press the plug firmly into the jack.

You may loosen the knob and adjust the vertical angle of the bracket for the best visibility.

Once you have the ERC mounted to the Skein-winder, you can then install the power supply. Plug the power supply cable into the **lower jack** on the LEFT side of the ERC (the upper jack is a data line for connecting the ERC to the HDSS Motor Drive, if equipped).

Route the power supply cable through the white twisty tie on the left side of the metal bracket and then twist the 2 legs together. This secures the cable from getting hung up in the rotating arms. Install any extra plastic cable catches at the lowest point on the I-Beam of the Skein-winder just prior to the Socket on the base. That way, if you remove the upper portion to mount it on the Floor Stand, you can do so.

ERC for existing NKK Swifts or 3rd party equipment

When the ERC is purchased separately, it can be mounted on an existing NKK Swift and then the Swift can be converted to a Skein-winder. An additional bracket is necessary to mount the ERC on the swift and can be purchased from NKK. You will also need to install the White magnetic switch assembly on the top of the Swift Column. You will need to remove the Wood Top Cap from the top of the Skein-winder column and install the magnetic sensor. See separate instructions for this process.

The ERC can also be retrofitted to other brands of swifts. These are somewhat custom from the standpoint that a special length magnetic sensor cable assembly will be needed and possibly a bracket as well. NKK can assist the buyer in designing and adapting the ERC to their swift/skein-winder.

Button Overview

Reset – this is the primary button that you will use most often. Press the Reset button once to clear the actual data in the top row of the display. Press this button twice to clear the Preset number that you entered in the bottom row.





Mode – this button changes the 3 modes in a rotating pattern (starts in Rotations (ROTS)) mode, then press Mode once and it shifts to Yards mode, and press it again and it is in Meters mode. One more press and it returns to Rotations mode.

Save – You will press the Save button after entering the number of inches or centimeters when asked in the Yards and Meters modes. You will also press the Save button after entering a preset quantity in any of the three modes (Rotations, Yards, and Meters). Saving this data tells the computer how to calculate the size of each rotation and what to count up to (preset).







Decade Switches (0000, 000, 00, 0) – these buttons are used to enter the number of inches, number of centimeters and also to enter a preset number in any of the 3 modes. In the inch mode, the decade switches are redefined temporarily so that 0000 = hundreds, 000 = tens, 00 = ones, and 0 = tenths of an inch. Otherwise, in all other cases, they mean 0000 = thousands, 000 = hundreds, 00 = tens, and 0 = ones.



Jacks

The ERC has 3 jacks. The top jack on the LEFT side is a data line and connects the ERC to the HDSS Motor Drive. When the ERC is connected to the HDSS Motor Drive, the ERC will turn the motor drive off when the preset number is reached. The bottom jack is for the 12 volt power supply. Do not plug the Motor Drive's 24 volt power supply into the ERC or it can damage the ERC! The jack on the right side is for connecting to the skein-winder's magnetic switch (this is what the cable coming out of the top of the skein-winder is connected to).

 <p>Plug in AC adaptor into the bottom jack of the ERC.</p>	 <p>The top jack is for use with the cable that connects to the HDSS Motor Drive.</p>	<p>Aluminum housing, grounded 12v power supply, commercial grade electronics package, user friendly control panel logic, works with our HDSS Motor Drive option.</p>
 <p>ERC Cable jack area</p>		<p>Tilt-able bracket for easy viewing at any height. White plastic cable stay to keep cables away from the skein-winder arms</p>

Operational Overview and Instructions

Mode & Preset	Task	Depress Button	LEDs Lit	LCD Display
1	Measure Rotations (ROTS) (count) – this is the default mode. Just load your yarn, press the RESET once prior to running job to zero out number and start measuring your yarn in ROTATIONS of the skein-winder.	None	ROTS	
2	<p>Measure Yards (length) – Press the Mode button once to get to Yards. The system will ask you to enter the number of inches around the wheel (circumference). Refer to the measurement labels on the arms and then convert to inches, or run the fiberglass tape around the arms and then enter the number of inches into the system. <u>NOTE: in Yards/Inches mode, the Decade buttons have a unique meaning as follows:</u></p> <ul style="list-style-type: none"> -Use 000 button to enter tens data -Use 00 button to enter units data -Use 0 button to enter tenths data <p>After entering the tens, units and possibly tenths of an inch numbers, press the SAVE button once. Then load your yarn. Assuming that you just want to measure yards and not enter a target qty., then just start measuring and the display will show the number of YARDS that have been wound.</p> <p>Important! If you want to measure a specific qty of yarn, then review the following instructions for Presets.</p>	Mode once	Yards	  
3	Measure Meters (length) – Switch Mode to Me. Menu will ask you to enter the number of centimeters around the wheel. Refer to the measurement labels on the arms and then convert to centimeters, or run the fiberglass tape around the arms and then enter the number of centimeters into the system. After entering the number, press the SAVE button once. Then start to measure.	Mode twice	Meters	
1 Preset	Measure Rotations up to a Preset Qty (count) – This starts with the default mode (Rotations or Rt). After switching to RT Mode, simply enter a Preset number that you want to measure by pressing the decade buttons (0000, 000, 00, 0) and then press the SAVE button. You will not be	None	ROTS	

	<p><u>presented with any menu asking for this data</u>, simply enter the number of rotations that you want to measure as a Preset. This will display the Preset (or target number) on the bottom row and the actual count will be in the top row). Press the RESET button <u>once</u> to ensure that your actual count is zero. When your Preset qty is reached, a tone will sound and the HDSS Motor Drive will stop (if connected).</p>			
2 Preset	<p>Measure Yards up to a Preset Qty (length) – Switch the Mode to Yd. You will be presented with a menu asking you to enter the number of inches in the rotation (circumference of your skein). Enter the number of INCHES per rotation. Then press the SAVE button. Then, just enter the Preset Qty. in YARDS that you want to measure (NOTE: you <u>will not</u> be prompted for YARDS, etc. when entering the Preset qty like you were when entering the circumference data). Just use the decade buttons (0000, 000, 00, 0) to enter the qty. of Yards and then press the SAVE button. Press the RESET button <u>once</u> to ensure that your actual count is zeroed out. The top row should now be Zero and the bottom Row should display your Preset qty in YARDS to be measured. Start winding (or unwinding) yarn onto the Skein-winder and when your Preset qty is reached, a tone will sound and the HDSS Motor Drive will stop (if connected).</p>	Mode once	Yards	
3 Preset	<p>Measure Meters up to a Preset Qty (length) – Switch the Mode to Me. You will be presented with a menu asking you to enter the number of centimeters in the rotation (circumference of your skein). Enter the number of centimeters per rotation. Immediately after that, just enter the Preset Qty in METERS (you will not be prompted for centimeters when entering the Preset qty like you were when entering the circumference data). When entering the Preset Qty. of Meters, pressing the decade buttons (0000, 000, 00, 0) and then the SAVE button. Press the RESET button <u>once</u> to ensure that your actual count is zero. Start winding (or unwinding) yarn onto the Skein-winder and when your Preset qty is reached, a tone will sound and the HDSS Motor Drive will stop (if connected).</p>	Mode twice	Meters	

Please remember, when entering the qty of inches or centimeters in your Rotation (the circumference of your skein), you will be prompted to enter the number of inches or centimeters upon entering the Yds or Me modes.

When entering the PRESET Qty of yards or meters that you want to measure (AFTER you entered the circumference data), you will not be prompted and the qty that you enter will be in yards or meters (not in inches or centimeters).

Important Information

1. To clear actual data, press RESET once
2. To clear a Preset qty in any mode, press the RESET button twice.
3. SLEEP Mode – the unit goes into SLEEP mode after 5 minutes of inactivity. Just press the RESET button ONCE to bring it out of SLEEP mode. Your last data will still be displayed unless you press the RESET button a second time. When in SLEEP mode, the display, and the LEDs are turned off but your data is maintained.
4. Master Reset – press the Save and Reset buttons simultaneously to reset all data (or you may remove the power plug and then re-insert it).
5. Mode Switch – when changing modes, all data is lost from the current mode. There are 3 Modes: Rotations, Yards, and Meters. All modes can have a Preset mode also.
6. Power – you may leave the unit on all of the time (there is no on/off button) and it will go into SLEEP mode when not being used. For periods longer than a few days, disconnect power cord or install a power strip with an on/off switch and switch the power strip off rather than unplug the ERC each time. Which can cause wear and tear on the jack.
7. Starting point – if the handle on the swift is connected to the unit, the weight of the handle will cause the wheel to “settle” with the handle hanging downward. This will put the magnet on the back of the same arm in the upper position near the magnetic pickup unit on the top of the I-Beam column. Depending on the direction that you are pulling yarn from, be sure to have the magnet clear the sensor before you start counting/winding or you will register a count before any yarn has actually been wound.
8. If the unit ever performs erratically, do a Master Reset or pull the power cord to “reboot” the ERC.

Warranty – The ERC is covered by an International 1 year commercial use limited warranty – NKK will repair or replace any part of the unit that fails during the one year period. Buyer must return the unit freight prepaid to NKK and NKK will return the repaired or replaced unit freight prepaid to Buyer. Buyer must secure a return authorization from NKK before returning unit.