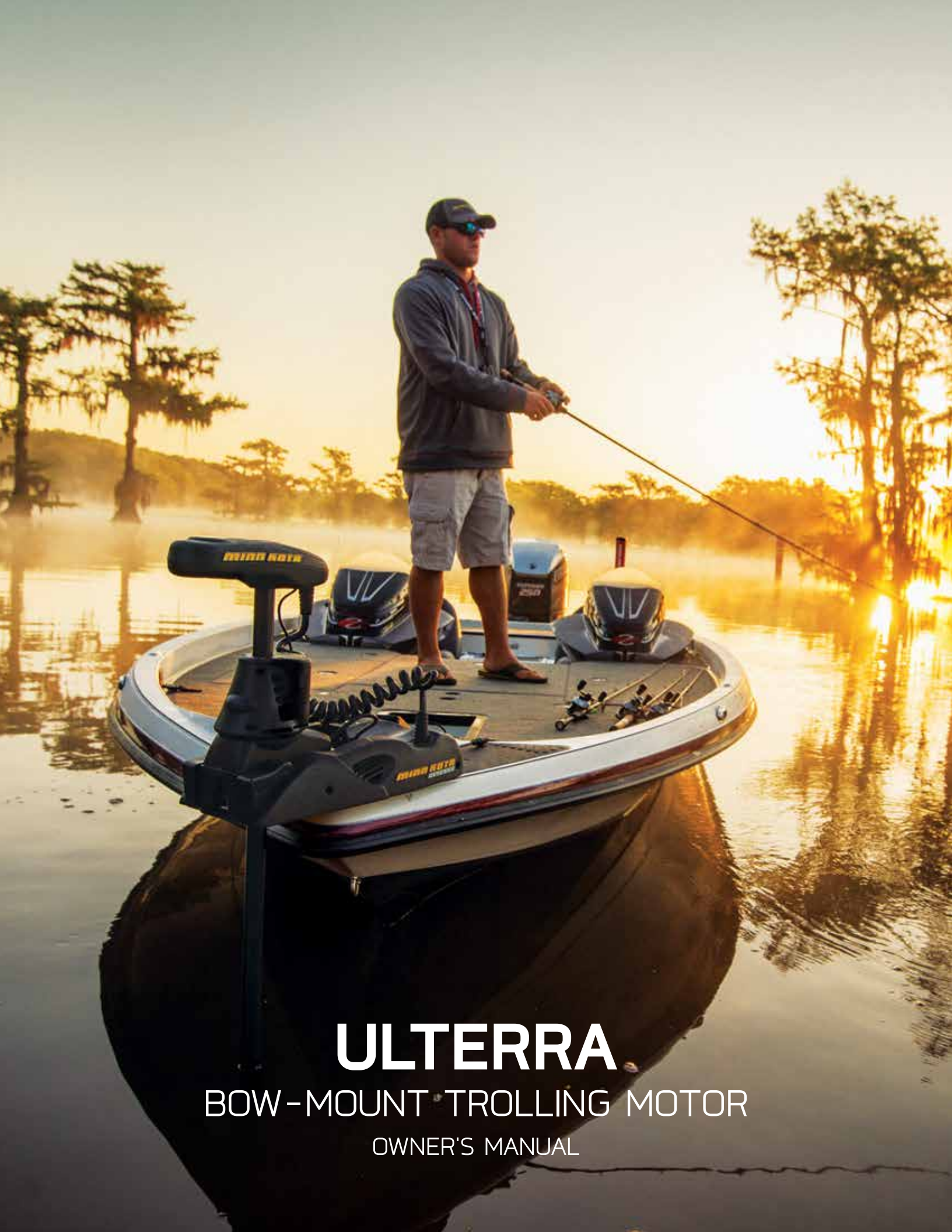

ULTERRA

BOW-MOUNT TROLLING MOTOR

OWNER'S MANUAL

CE MASTER USER MANUAL (FOR CE/C-TICK CERTIFIED MODELS)
Conforms to 89/336/EEC (EMC) under standards EN 55022A, EN 50082-2 since 1996 LN V9677264

THANK YOU

Thank you for purchasing the Minn Kota Ulterra electric steer trolling motor. This motor provides the ultimate hands-off operation by giving the user automatic stow and deploy and powered trim as well as all the other MinnKota electric steer motor features that users have grown to love. The simplicity of use maximizes your time on the water and ensures you spend your time fishing. By following the instructions provided in this manual, you will learn how to properly install and operate your new Ulterrra for years of trouble free use. We encourage you to read this manual thoroughly in order to maximize your product experience.

REMEMBER TO KEEP YOUR RECEIPT AND IMMEDIATELY REGISTER YOUR TROLLING MOTOR.
A registration card is enclosed or you can complete registration on the internet at minnkotamotors.com.

NOTE: Do not return your Minn Kota motor to your retailer. Your retailer is not authorized to repair or replace this unit. You may obtain service by: calling Minn Kota at (800) 227-6433; returning your motor to the Minn Kota Factory Service Center; sending or taking your motor to any Minn Kota authorized service center. A list of authorized service centers is available on our website, at minnkotamotors.com. Please include proof of purchase, serial number and purchase date for warranty service with any of the above options.

Please thoroughly read this user manual. Follow all instructions and heed all safety and cautionary notices below. Use of this motor is only permitted for persons that have read and understood these user instructions. Minors may use this motor only under adult supervision.

ATTENTION: Never run the motor out of the water, as this may result in injuries from the rotating propeller. The motor should be disconnected from the power source when it is not in use or is off the water. When connecting the power-supply cables of the motor to the battery, ensure that they are not kinked or subject to chafe and route them in such a way that persons cannot trip over them. Before using the motor make sure that the insulation of the power cables is not damaged. Disregarding these safety precautions may result in electric shorts of battery(s) and/or motor. Always disconnect motor from battery(s) before cleaning or checking the propeller. Avoid submerging the complete motor as water may enter the lower unit through control head and shaft. If the motor is used while water is present in the lower unit considerable damage to the motor can occur. This damage will not be covered by warranty.

CAUTION: Take care that neither you nor other persons approach the turning propeller too closely, neither with body parts nor with objects. The motor is powerful and may endanger or injure you or others. While the motor is running watch out for persons swimming and for floating objects. Persons whose ability to run the motor or whose reactions are impaired by alcohol, drugs, medication, or other substances are not permitted to use this motor. This motor is not suitable for use in strong currents. The constant noise pressure level of the motor during use is less than 70dB(A). The overall vibration level does not exceed 2,5m/sec2.

You are responsible for the safe and prudent operation of your vessel. We have designed i-Pilot to be an accurate and reliable tool that will enhance boat operation and improve your ability to catch fish. This product does not relieve you from the responsibility for safe operation of your boat. You must avoid hazards to navigation and always maintain a permanent watch so you can respond to situations as they develop. You must always be prepared to regain manual control of your boat. Learn to operate your i-Pilot in an area free from hazards and obstacles.

LOCATING YOUR SERIAL NUMBER

Your Minn Kota 11-character serial number is very important. It helps to determine the specific model and year of manufacture. When contacting Consumer Service or registering your product, you will need to know your product's serial number. We recommend that you write the serial number down in the space provided below so that you have it available for future reference.

The serial number on your Ulterra is located inside the mount near the motor rests.

Model: _____

Serial Number: _____

Purchase Date: _____

Store Where Purchased: _____

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TWO-YEAR LIMITED WARRANTY

WARRANTY ON MINN KOTA I-PILOT® AND I-PILOT® LINK™ WIRELESS GPS TROLLING SYSTEM ACCESSORY

Johnson Outdoors Marine Electronics, Inc. ("JOME") extends the following limited warranty to the original retail purchaser only. Warranty coverage is not transferable.

MINN KOTA LIMITED TWO-YEAR WARRANTY ON THE ENTIRE PRODUCT

JOME warrants to the original retail purchaser only that the purchaser's new Minn Kota i-Pilot® or i-Pilot® Link™ Wireless GPS Trolling System Accessory will be materially free from defects in materials and workmanship appearing within two (2) years after the date of purchase. JOME will (at its option) either repair or replace, free of charge, any parts found by JOME to be defective during the term of this warranty. Such repair, or replacement shall be the sole and exclusive liability of JOME and the sole and exclusive remedy of the purchaser for breach of this warranty.

EXCLUSIONS AND LIMITATIONS

This limited warranty does not apply to products that have been used commercially or for rental purposes. This limited warranty does not cover normal wear and tear, blemishes that do not affect the operation of the product, or damage caused by accidents, abuse, alteration, modification, shipping damages, acts of God, negligence of the user or misuse, improper or insufficient care or maintenance. **DAMAGE CAUSED BY THE USE OF OTHER REPLACEMENT PARTS NOT MEETING THE DESIGN SPECIFICATIONS OF THE ORIGINAL PARTS WILL NOT BE COVERED BY THIS LIMITED WARRANTY.** The cost of normal maintenance or replacement parts which are not in breach of the limited warranty are the responsibility of the purchaser. Prior to using products, the purchaser shall determine the suitability of the products for the intended use and assumes all related risk and liability. Any assistance JOME provides to or procures for the purchaser outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of the terms, limitations or exclusions, nor will such assistance extend or revive the warranty. JOME will not reimburse the purchaser for any expenses incurred by the purchaser in repairing, correcting or replacing any defective products or parts, except those incurred with JOME's prior written permission. **JOME'S AGGREGATE LIABILITY WITH RESPECT TO COVERED PRODUCTS IS LIMITED TO AN AMOUNT EQUAL TO THE PURCHASER'S ORIGINAL PURCHASE PRICE PAID FOR SUCH PRODUCT.**

HOW TO OBTAIN WARRANTY SERVICE

To obtain warranty service in the U.S., the product believed to be defective, and proof of original purchase (including the date of purchase), must be presented to Minn Kota's factory service center in Mankato, MN. Any charges incurred for service calls, transportation or shipping/freight to/from the factory, labor to haul out, remove, re-install or re-rig products removed for warranty service, or any other similar items are the sole and exclusive responsibility of the purchaser. Products purchased outside of the U.S. must be returned prepaid with proof of purchase (including the date of purchase and serial number) to any Authorized Minn Kota Service Center in the country of purchase. Warranty service can be arranged by contacting the factory at 1-800-227-6433 or email service@minnkotamotors.com. **Products repaired or replaced will be warranted for the remainder of the original warranty period [or for 90 days from the date of repair or replacement, whichever is longer]. For any product that is returned for warranty service that JOME finds to be not covered by or not in breach of this limited warranty, there will be a billing for services rendered at the prevailing posted labor rate and for a minimum of at least one hour.**

NOTE: Do not return your Minn Kota product to your retailer. Your retailer is not authorized to repair or replace products.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THESE LIMITED WARRANTIES. IN NO EVENT SHALL ANY IMPLIED WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, EXTEND BEYOND THE DURATION OF THE RELEVANT EXPRESS LIMITED WARRANTY. IN NO EVENT SHALL JOME BE LIABLE FOR PUNITIVE, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES. Without limiting the foregoing, JOME assumes no responsibility for loss of use of product, loss of time, inconvenience or other damage.

HOW DOES STATE LAW APPLY? Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

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WARRANTY ON MINN KOTA FRESHWATER TROLLING MOTORS

Johnson Outdoors Marine Electronics, Inc. ("JOME") extends the following limited warranty to the original retail purchaser only. Warranty coverage is not transferable.

MINN KOTA LIMITED TWO-YEAR WARRANTY ON THE ENTIRE PRODUCT

JOME warrants to the original retail purchaser only that the purchaser's new Minn Kota freshwater trolling motor will be materially free from defects in materials and workmanship appearing within two (2) years after the date of purchase. JOME will (at its option) either repair or replace, free of charge, any parts found by JOME to be defective during the term of this warranty. Such repair, or replacement shall be the sole and exclusive liability of JOME and the sole and exclusive remedy of the purchaser for breach of this warranty.

MINN KOTA LIMITED LIFETIME WARRANTY ON COMPOSITE SHAFT

JOME warrants to the original retail purchaser only that the composite shaft of the purchaser's Minn Kota trolling motor will be materially free from defects in materials and workmanship appearing within the original purchaser's lifetime. JOME will provide a new composite shaft, free of charge, to replace any composite shaft found by JOME to be defective during the term of this warranty. Providing a new composite shaft shall be the sole and exclusive liability of JOME and the sole and exclusive remedy of the purchaser for breach of this warranty; **and purchaser shall be responsible for installing, or for the cost of labor to install, any new composite shaft provided by JOME.**

EXCLUSIONS & LIMITATIONS

This limited warranty does not apply to products that have been used in saltwater or brackish water, commercially or for rental purposes. This limited warranty does not cover normal wear and tear, blemishes that do not affect the operation of the product, or damage caused by accidents, abuse, alteration, modification, shipping damages, acts of God, negligence of the user or misuse, improper or insufficient care or maintenance. **DAMAGE CAUSED BY THE USE OF OTHER REPLACEMENT PARTS NOT MEETING THE DESIGN SPECIFICATIONS OF THE ORIGINAL PARTS WILL NOT BE COVERED BY THIS LIMITED WARRANTY.** The cost of normal maintenance or replacement parts which are not in breach of the limited warranty are the responsibility of the purchaser. Prior to using products, the purchaser shall determine the suitability of the products for the intended use and assumes all related risk and liability. Any assistance JOME provides to or procures for the purchaser outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of the terms, limitations or exclusions, nor will such assistance extend or revive the warranty. JOME will not reimburse the purchaser for any expenses incurred by the purchaser in repairing, correcting or replacing any defective products or parts, except those incurred with JOME's prior written permission. **JOME'S AGGREGATE LIABILITY WITH RESPECT TO COVERED PRODUCTS IS LIMITED TO AN AMOUNT EQUAL TO THE PURCHASER'S ORIGINAL PURCHASE PRICE PAID FOR SUCH PRODUCT.**

MINN KOTA SERVICE INFORMATION

To obtain warranty service in the U.S., the product believed to be defective, and proof of original purchase (including the date of purchase), must be presented to a Minn Kota Authorized Service Center or to Minn Kota's factory service center in Mankato, MN. Any charges incurred for service calls, transportation or shipping/freight to/from the Minn Kota Authorized Service Center or factory, labor to haul out, remove, re-install or re-rig products removed for warranty service, or any other similar items are the sole and exclusive responsibility of the purchaser. Products purchased outside of the U.S. must be returned prepaid with proof of purchase (including the date of purchase and serial number) to any Authorized Minn Kota Service Center in the country of purchase. Warranty service can be arranged by contacting a Minn Kota Authorized Service Center or by contacting the factory at 1-800-227-6433 or email service@minnkotamotors.com. **Products repaired or replaced will be warranted for the remainder of the original warranty period [or for 90 days from the date of repair or replacement, whichever is longer]. For any product that is returned for warranty service that JOME finds to be not covered by or not in breach of this limited warranty, there will be a billing for services rendered at the prevailing posted labor rate and for a minimum of at least one hour.**

NOTE: Do not return your Minn Kota product to your retailer. Your retailer is not authorized to repair or replace products.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THESE LIMITED WARRANTIES. IN NO EVENT SHALL ANY IMPLIED WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, EXTEND BEYOND THE DURATION OF THE RELEVANT EXPRESS LIMITED WARRANTY. IN NO EVENT SHALL JOME BE LIABLE FOR PUNITIVE, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES. Without limiting the foregoing, JOME assumes no responsibility for loss of use of product, loss of time, inconvenience or other damage.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

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INSTALLATION

PARTS INCLUDED

Your new Ulterra comes out of the box with everything you'll need for direct to boat mounting. This motor can be direct mounted to the boat or coupled with a Minn Kota quick release bracket for ease of mounting and dismounting. For appropriate quick release mounting brackets and to locate your nearest dealer, visit minnkotamotors.com. Please review the parts list and tools needed for installation prior to getting started. To help with future service work or ordering replacement parts please refer to the information provided in the Parts List section of this manual.

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MOUNTING OPTIONS

prop in vs. out (provided in outline?) - content needed
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

TOOLS AND RESOURCES REQUIRED:

- Drill
- 5/16” Drill Bit
- 7/16” Box End Wrench
- Wire ties for cable routing
- Phillips Screwdriver
- Flat blade screwdriver

INSTALLATION

1. Remove the four sideplate screws. Remove sideplates to access the mounting holes.
2. Remove the two 5/16” E-clips retaining the extension damper. Remove the extension damper to expose the front left mounting hole.
3. Place the motor on the bow of the boat. It is recommended that the motor be mounted as close to the centerline of the boat as possible. Ensure that the area under the mounting location is clear of anything that would prevent unobstructed drill and installation of nuts and washers. Make sure that when deployed, the shaft resides a minimum of 1 ½” from the boat rub rail. This can be done by measuring from X to X. This should be no less than XX.

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4. Once the motor is positioned, mark at minimum four of the six holes that are located farthest apart. Drill through the marked holes using a 5/16" drill bit

5. Mount the motor to the boat using the provided hardware. Hardware location and orientation should be as shown in the below figure.
6. Reinstall extension damper with shaft facing toward the interior of the boat. Reinstall e-clips

7. Replace the sideplates and sideplate screws.
8. Connect power and other cables

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BATTERY WIRING & INSTALLATION

BOAT RIGGING & PRODUCT INSTALLATION

For safety and compliance reasons, we recommend that you follow American Boat and Yacht Council (ABYC) standards when rigging your boat. Altering boat wiring should be completed by a qualified marine technician. The following specifications are for general guidelines only:

CAUTION: These guidelines apply to general rigging to support your Minn Kota motor. Powering multiple motors or additional electrical devices from the same power circuit may impact the recommended conductor gauge and circuit breaker size. If you are using wire longer than that provided with your unit, follow the conductor gauge and circuit breaker sizing table below. If your wire extension length is more than 25 feet, we recommend that you contact a qualified marine technician.

An over-current protection device (circuit breaker or fuse) must be used. Coast Guard requirements dictate that each ungrounded current-carrying conductor must be protected by a manually reset, trip-free circuit breaker or fuse. The type (voltage and current rating) of the fuse or circuit breaker must be sized accordingly to the trolling motor used. The table below gives recommended guidelines for circuit breaker sizing.

Reference:

United States Code of Federal Regulations: 33 CFR 183 – Boats and Associated Equipment

ABYC E-11: AC and DC Electrical Systems on Boats

CONDUCTOR GAUGE AND CIRCUIT BREAKER SIZING TABLE

Motor Thrust / Model	Max Amp Draw	Circuit Breaker	Wire Extension Length *				
			5 feet	10 feet	15 feet	20 feet	25 feet
30 lb.	30	50 Amp @ 12 VDC	10 AWG	10 AWG	8 AWG	6 AWG	4 AWG
40 lb., 45 lb.	42		10 AWG	8 AWG	6 AWG	4 AWG	4 AWG
50 lb., 55 lb.	50	60 Amp @ 12 VDC	8 AWG	6 AWG	4 AWG	4 AWG	2 AWG
70 lb.	42	50 Amp @ 24 VDC	10 AWG	10 AWG	8 AWG	8 AWG	6 AWG
80 lb.	56	60 Amp @ 24 VDC	8 AWG	8 AWG	8 AWG	6 AWG	6 AWG
101 lb.	46	50 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
Engine Mount 101	50	60 Amp @ 36 VDC	8 AWG	6 AWG	4 AWG	4 AWG	2 AWG
112 lb.	52	60 Amp @ 36 VDC	8 AWG	8 AWG	8 AWG	8 AWG	8 AWG
Engine Mount 160	116	(2) x 60 Amp @ 24 VDC	2 AWG	2 AWG	2 AWG	2 AWG	2 AWG
E-Drive	40	50 Amp @ 48 VDC	10 AWG	10 AWG	10 AWG	10 AWG	10 AWG

This conductor and circuit breaker sizing table is only valid for the following assumptions:

1. No more than 3 conductors are bundled together inside of a sheath or conduit outside of engine spaces.
2. Each conductor has 105° C temp rated insulation.
3. No more than 5% voltage drop allowed at full motor power based on published product power requirements.

***Wire Extension Length refers to the distance from the batteries to the trolling motor leads.**

SELECTING THE CORRECT BATTERIES

The motor will operate with any lead acid, deep cycle marine 12 volt battery/batteries. For best results, use a deep cycle, marine battery with at least a 105 ampere hour rating. Maintain battery at full charge. Proper care will ensure having battery power when you need it, and will significantly improve the battery life. Failure to recharge lead-acid batteries (within 12-24 hours) is the leading cause of premature battery failure. Use a multi-stage charger to avoid overcharging. We offer a wide selection of chargers

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to fit your charging needs. If you are using a crank battery to start a gasoline outboard, we recommend that you use a separate deep cycle marine battery/batteries for your Minn Kota trolling motor.

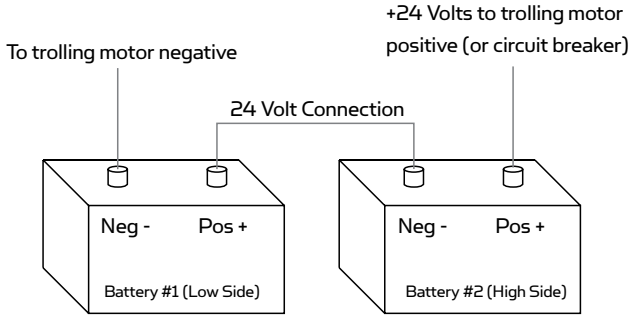
Advice Regarding Batteries:

- Never connect the (+) and the (–) terminals of the battery together. Take care that no metal object can fall onto the battery and short the terminals. This would immediately lead to a short and extreme fire danger.
- It is highly recommended that a circuit breaker or fuse be used with this trolling motor. Refer to "Conductor Gauge and Circuit Breaker Sizing Table" in the previous section to find the appropriate circuit breaker or fuse for your motor. For motors requiring a 60-amp breaker, the Minn Kota MKR-19 60-amp circuit breaker is recommended.

CONNECTING THE BATTERIES IN SERIES (IF REQUIRED FOR YOUR MOTOR)

24 VOLT SYSTEMS:

1. Make sure that the motor is switched off (speed selector on "0").
2. Two 12 volt batteries are required.
3. The batteries must be wired in series, only as directed in wiring diagram, to provide 24 volts.
   a. Connect a connector cable to the positive (+) terminal of battery 1 and to the negative (–) terminal of battery 2.
   b. Connect positive (+) red lead to positive (+) terminal on battery 2.
   c. Connect negative (–) black lead to negative (–) terminal of battery 1.
4. For safety reasons do not switch the motor on until the propeller is in the water. If installing a leadwire plug, observe proper polarity and follow instructions in your boat owner's manual. See wiring diagram on following pages.

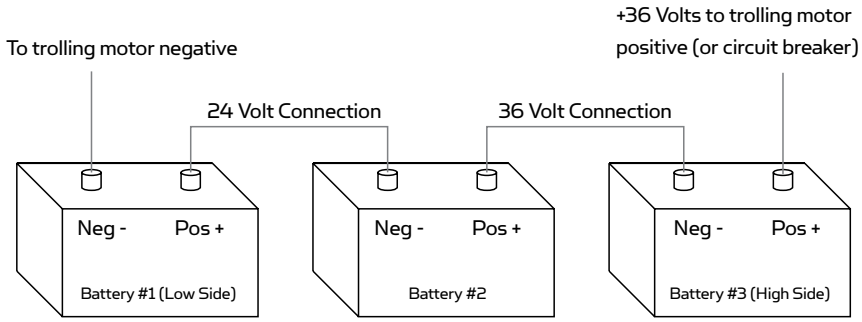


24 Volt Series Connection

HOW TO CONNECT THE BATTERIES IN SERIES (IF REQUIRED FOR YOUR MOTOR)

36 VOLT SYSTEMS:

1. Make sure that the motor is switched off (speed selector on "0").
2. Three 12 volt batteries are required.
3. The batteries must be wired in series, only as directed in wiring diagram, to provide 36 volts.
   a. Connect a connector cable to the positive (+) terminal of battery 1 and to the negative (–) terminal of battery 2 and another connector cable from the positive (+) terminal of battery 2 to the negative (–) terminal of battery of battery 3.
   b. Connect positive (+) red lead to positive (+) terminal on battery 3.
   c. Connect negative (–) black lead to negative (–) terminal of battery 1.
4. For safety reasons do not switch the motor on until the propeller is in the water. If installing a leadwire plug, observe proper polarity and follow instructions in your boat owner's manual. See wiring diagram on following pages.



36 Volt Series Connection

CAUTION

- **Improper wiring of 24/36 volt systems could cause battery explosion!**
- **Keep leadwire wing nut connection tight and solid to battery terminals.**
- **Locate battery in a ventilated compartment.**
- **For safety reasons, disconnect the motor from the battery or batteries when the motor is not in use or while the battery/batteries are being charged.**

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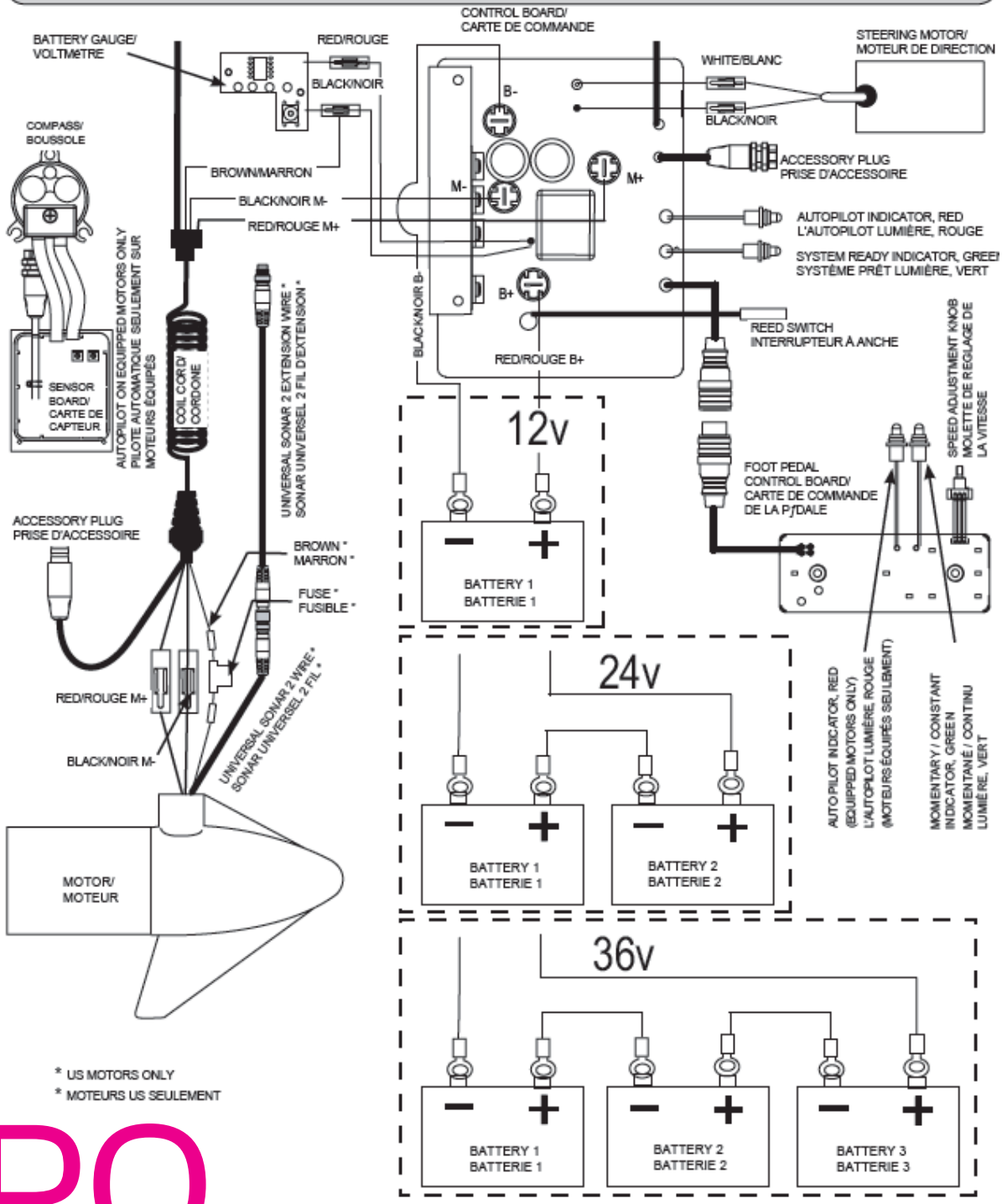
MOTOR WIRING DIAGRAM

Over-Current Protection Devices not shown in illustrations. Les Artifices de Protection Suractuels non montrés en illustrations.

THIS IS A UNIVERSAL MULTI-VOLTAGE DIAGRAM. DOUBLE CHECK YOUR MOTORS VOLTAGE FOR PROPER CONNECTIONS
CECI EST UN SCHÉMA À TENSION MULTIPLE UNIVERSEL. REVÉRIFIEZ LA TENSION DE VOTRE MOTEUR POUR BIEN LE BRANCHER.



* US MOTORS ONLY
* MOTEURS US SEULEMENT

FPO

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GETTING STARTED

MOTOR FEATURES

Specifications subject to change without notice.
*This diagram is for reference only and may differ from your actual motor.

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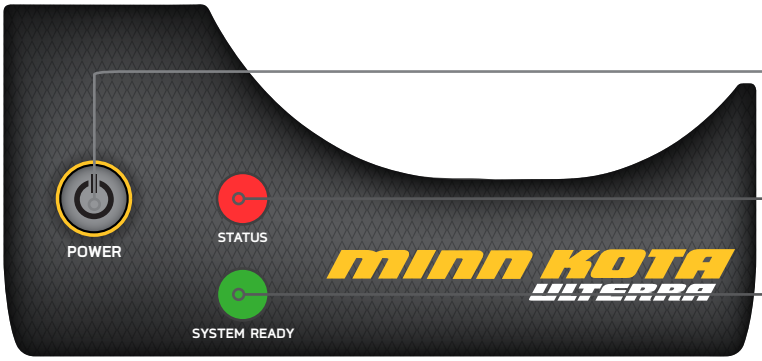
CONTROL PANEL



Power Switch: depressing of power switch is required to power' the motor on/off

Status (red LED):

System Ready (green LED): The motor is equipped with a system ready indicator. The indicator light will be illuminated when the motor is connected to power and switched on.

FOOT PEDAL FEATURES

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TRIMMING UP AND DOWN

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Trimming Up and Down using the Foot Pedal: Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit

Trimming Up and Down using the i-Pilot remote: Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit

STOWING AND DEPLOYING THE MOTOR

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Stowing and Deploying the Motor with the Foot Pedal: Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate

Stowing and Deploying the Motor with the i-Pilot remote: Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate

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KNOWING YOUR REMOTE

LAYOUT

The i-Pilot remote is divided into four sections: **Manual Control, Tracks, Spot Lock, and Cruise Control/AutoPilot.** Buttons in the **Manual Control** section of the remote do not require a GPS signal to operate and give you full, immediate control over steering, speed and prop functions similar to a **CoPilot**. All other buttons require a minimum GPS signal strength of one bar in order to operate. Buttons located in the **Tracks** section are used for track recording and playback. **Spot Lock** buttons are located in the Spot Lock section. **Cruise Control/AutoPilot** are located in the **Cruise Control/AutoPilot** section.

CONSTRUCTION

The remote is waterproof and floats in water.

RANGE

The range of the remote will be greatly reduced if it is used near or mounted to any metal object including aluminum or steel. It is also recommended that the front end of the remote not be obstructed during use.

BATTERY LIFE

Remote battery life is subject to frequency of use and is especially impacted by how often the LCD backlight is used.
When the remote battery is low, will appear on the remote LCD. The **Backlight** button will be disabled when is displayed to conserve battery power.

POWER

When a button is pressed on the remote it will automatically turn on. To turn the remote off press and hold for three seconds. The remote will automatically turn itself off thirty minutes after the last button press if a learned i-Pilot controller is powered up and within transmitting range. The remote will turn off after three seconds if the i-Pilot controller is powered down or out of transmitting range.

KEYPAD LOCK

The user can lock the keypad during use to help avoid accidental key activations. To lock or unlock the keypad, press and hold for 3 seconds. When the keypad is locked, will appear on the remote LCD. Note that the keypad is always unlocked when the remote is first turned on.

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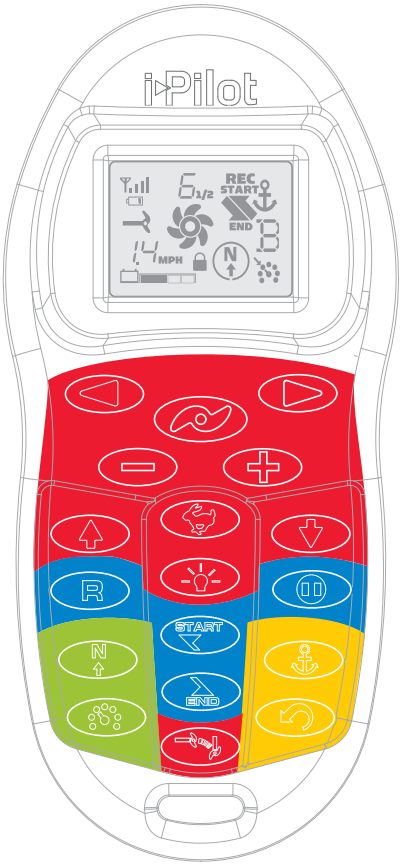


MANUAL CONTROL

Steer Left

Steer Right

Prop On/Off

Speed Down

Speed Up

Stow Motor

Deploy Motor

High Speed Bypass
Toggles the motor speed between its current setting and speed 10.

Backlight
Turns the remote LCD backlighting on for six seconds.

Keypad Lock/Unlock
To lock or unlock the keypad, press and hold the backlight button for 3 seconds.

Trim Motor

TRACKS

Track to End
Navigates to the nearest location on a previously recorded track and follows it to its end.

Track to Start
Navigates to the nearest location on a previously recorded track and follows it to its start.

Track Record
Starts and ends the recording of a track to a selected memory location.

Record Pause/Escape
Pauses the recording of a track and then resumes the recording when pressed again.

SPOT-LOCK

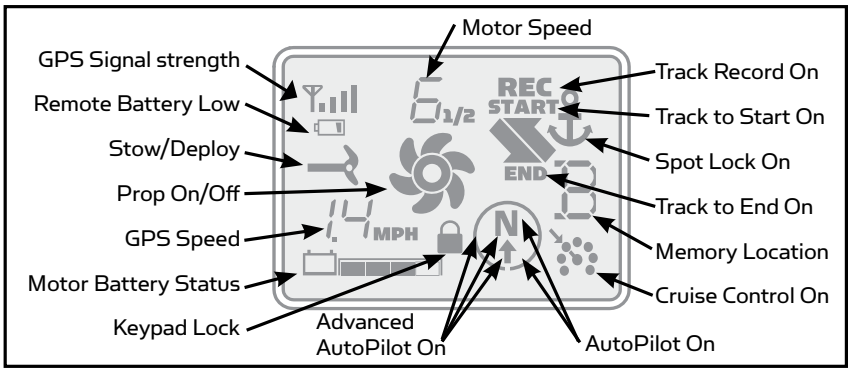
Spot-Lock
Turns Spot-Lock on and records it to a memory location.

Spot-Lock Recall
Recalls a Spot-Lock from memory and turns spot lock on.

CRUISE CONTROL/ AUTOPILOT

Advanced AutoPilot and AutoPilot
Turns Advanced AutoPilot on and off when pressed once. Turns AutoPilot on when held for two seconds.

Cruise Control
Turns cruise control on and off using the current GPS speed as the target speed.



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REMOTE BATTERY REPLACEMENT

1. Make sure hands are clean, dry and static free. Discharge any static electricity by touching a metal object that is grounded. *Static electricity can damage the circuit board.
2. With the remote upside down, use a large coin to rotate the battery door counterclockwise until either of the Unlock icons align with the arrow (see Figure B).
3. Remove battery cover and old battery and replace with new CR2450 coin cell battery. Note the proper polarity of the battery (see Figure A).
4. Ensure the two rubber o-rings are properly seated in the underside of the battery cover.
5. Replace battery cover by aligning either of the Unlock icons with the arrow, pressing the cover down and rotating clockwise until the Lock icon aligns with the arrow (see Figure C).

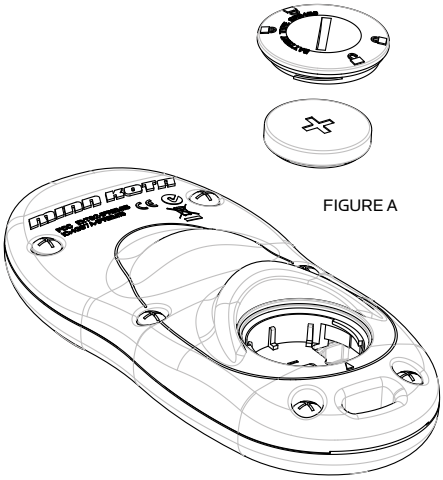

FIGURE A

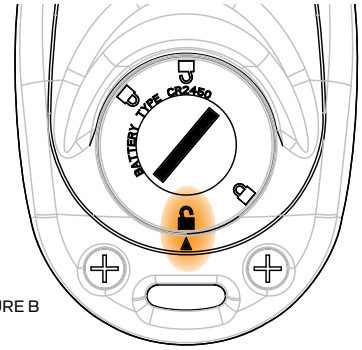

FIGURE B

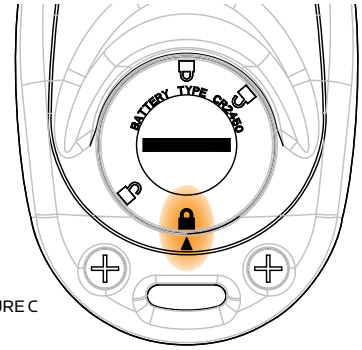

FIGURE C

KNOWING YOUR I-PILOT CONTROLLER

CONSTRUCTION

The i-Pilot controller contains a very sensitive digital compass and is where all GPS satellite and i-Pilot remote signals are received. It is very important that the controller have a clear view of the sky in all directions and has a clear line of sight to the remote for optimum performance. All electronics within the controller enclosure are completely sealed.

REMOTE LEARNING

The i-Pilot remote is prelearned to the controller from the factory. The top of the controller has a single learn button to allow additional remotes to be added to the system. To learn additional remotes:

1. Power up the trolling motor.
2. Push and hold the learn button down. A steady audio tone will be heard while holding this button.
3. While holding the learn button down push any button on the remote being programmed. Three beeps will be heard when the remote is successfully learned.

A remote can only be learned to one controller at a time. A controller can have an unlimited number of remotes learned to it. During the learn process, the remote must start out in the OFF condition. If necessary, the remote can be turned off by pressing and holding the Pause button for three seconds.

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AUDIO MODES

The i-Pilot Controller also contains an internal speaker which can be programmed to work in two different audio modes. The speaker is programmed to operate in audio mode one from the factory. To enable different audio modes hold + and − down at the same time for three seconds. For an explanation of each audio mode and their sounds see the table below.

WHAT CONDITION CAUSES IT	AUDIO MODE	AUDIO PATTERN
Startup	Modes 1 and 2	4 Short beeps
Manual prop on	Mode 2	Single beep
Manual prop off	Mode 2	Double beep
Speed + (when less than max speed)	Mode 2	Single beep
Speed - (when greater than speed 0)	Mode 2	Single beep
High Speed Bypass enable	Mode 2	Single beep
High Speed Bypass disable	Mode 2	Double beep
Button press for any of these (enable or disable): REC, Pause, Track to Start, Track to End, AutoPilot, Cruise Control, Spot Lock, Spot Lock Recall	Mode 2	Single beep
Moving more than a quarter mile from the last track point while in Record Pause mode	Mode 2	Error
When GPS Signal Strength goes to no bars while in a GPS-based mode	Mode 2	Error
Attempting to enable a GPS feature when no signal strength bars are shown	Mode 2	Error
Attempting to replay a Track or recall a Spot Lock location when the boat is beyond the minimum distance	Mode 2	Error
MOM button on the footpedal is pressed and a remote button press attempts to override it	Mode 2	Error
End of track attained during track playback (in conjunction with cancelling mode and turning the prop off)	Mode 2	High-Low, High-Low, High-Low
Switch to Audio Mode 1	Modes 1 and 2	Single beep
Switch to Audio Mode 2	Modes 1 and 2	Double beep
Learn button is pressed	Modes 1 and 2	Steady tone
Learn successfully completed	Modes 1 and 2	3 longer beeps

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POWER

The i-Pilot controller will turn on whenever the trolling motor has power. For Terrova and Riptide ST motors this is when the green system ready light is on. For PowerDrive V2 and Riptide SP motors this is whenever the motor is connected to power.

*For this reason it is very important to disconnect a PowerDrive V2 or Riptide SP motor from power when not in use or battery drain will occur.

ACCURACY

The accuracy and responsiveness with which i-Pilot controls your boat is highly dependent upon many variables. Just a few of these variables and their general effects on responsiveness and accuracy are given below so that the behavior of the system can be understood.

VARIABLE	EFFECT
Ratio of motor thrust to boat weight	Excessive thrust on a smaller boat can cause i-Pilot to overcorrect. Not enough thrust on a large boat can cause i-Pilot to respond slowly.
Wind	Excessive wind and/or current can reduce i-Pilot's positioning accuracy.
GPS signal strength	The greater number of GPS signal bars the greater the accuracy.
Trolling motor battery power level	A fully charged battery will give the best performance.

SYSTEM STARTUP

Once you have verified i-Pilot's installation it's time to start using it on the water. Follow these simple steps each time you power up your trolling motor for successful operation:

1. Connect trolling motor to power.
2. Deploy trolling motor into water.
3. Push any button on your remote. The remote LCD will show prop speed and GPS signal strength.
4. You are now able to use all manual functions: and .
5. After i-Pilot has obtained a minimum GPS signal strength of one bar, all remaining functions will become available.

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MANUAL CONTROL

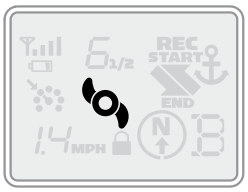
MANUAL CONTROL FUNCTIONALITY

This section describes all Manual Control functions of i-Pilot. A manual function is one in which the operator takes full control of the function such as manually steering the motor in a desired direction or manually adjusting the prop speed to the desired setting. Any of these functions do not require a GPS signal.

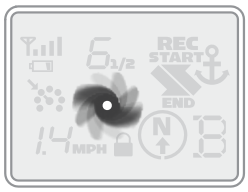
MOTOR ON/OFF

To turn the motor on or off press .

The prop icon on the LCD will be on if the prop is enabled and off if the prop is disabled. With the prop enabled, the icon will be stationary if the motor speed is zero and the icon will rotate if the motor speed is greater than zero.



Prop Enabled



Motor Speed Greater Than Zero

MOTOR SPEED CONTROL

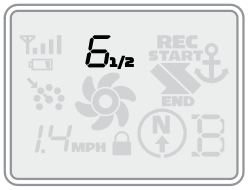
Increase Motor Speed

To increase the motor speed push on the remote. Each push of will increment the motor speed by ½ to a maximum of 10.

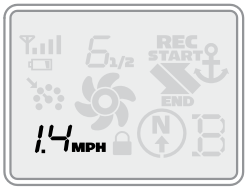
DECREASE MOTOR SPEED

To decrease the motor speed push on the remote. Each push of will decrement the motor speed by ½ to a minimum of 0.

The remote LCD will display the current motor speed setting. This is not to be confused with the GPS speed which is also displayed on the remote LCD.



Motor Speed



GPS Speed

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MOTOR STEERING CONTROL

Steer Left

To steer the motor to the left press .

Steer right

To steer the motor to the right press .

If a steering button is held down for more than six to eight seconds, the steering will stop to prevent the coil cord from wrapping on the motor.

HIGH SPEED BYPASS OPERATION

Engage

Pressing will set the motor speed to maximum immediately.

Disengage

Pressing again will set the motor speed to the value it was at previously.

**Note: High Speed Bypass does not enable or disable the prop.*

LCD BACKLIGHT BUTTON

To turn on LCD backlighting press and release .

The backlight will turn off eight seconds after the last button press to conserve battery power.

FOOT PEDAL OPERATION

- Pressing the MOM or CON button on the foot pedal will adjust the motor speed setting to the foot pedal speed setting.
- While the MOM button is pressed on the foot pedal, all speed and prop changes from the i-Pilot are ignored.

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GPS MOTOR CONTROL

UNDERSTANDING HOW THE I-PILOT SYSTEM WORKS

NAVIGATION

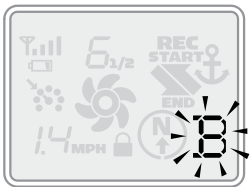
i-Pilot uses GPS satellite signals as well as digital compass data to know where it is, where it is heading and the direction the motor is pointing. Since i-Pilot depends on GPS satellite signals for navigation, a minimum GPS signal level of one bar is required in order for GPS navigation controls to be enabled. Best results are achieved when a GPS signal level of four bars can be obtained.

In simple terms, i-Pilot remembers and creates points to navigate your boat automatically. i-Pilot also uses a method of GPS navigation called arrival circles. These imaginary circles allow i-Pilot to understand when it has drifted away from a point and when it has arrived at a point. The size of the arrival circles vary depending on GPS signal strength, thus the greater the signal strength the smaller the arrival circles.

TRACKS

Tracks are made of many points that i-Pilot records when recording a track. The distance between these points varies based on GPS signal strength and the speed at which you record the track. When a track is played back, i-Pilot uses the track points and arrival circles to navigate the track.

MEMORY



i-Pilot has the capability of storing up to six individual tracks (each two miles in length) and six individual **Spot Lock** locations. These locations are stored in memory even when power is removed from the system. **Spot Lock** and **Track** memory locations are separate from each other and they cannot over write each other. Memory locations are identified on the remote LCD with an icon shown as A, B, C, D, E or F. When the memory icon is flashing, a different location can be selected by pressing + or −.

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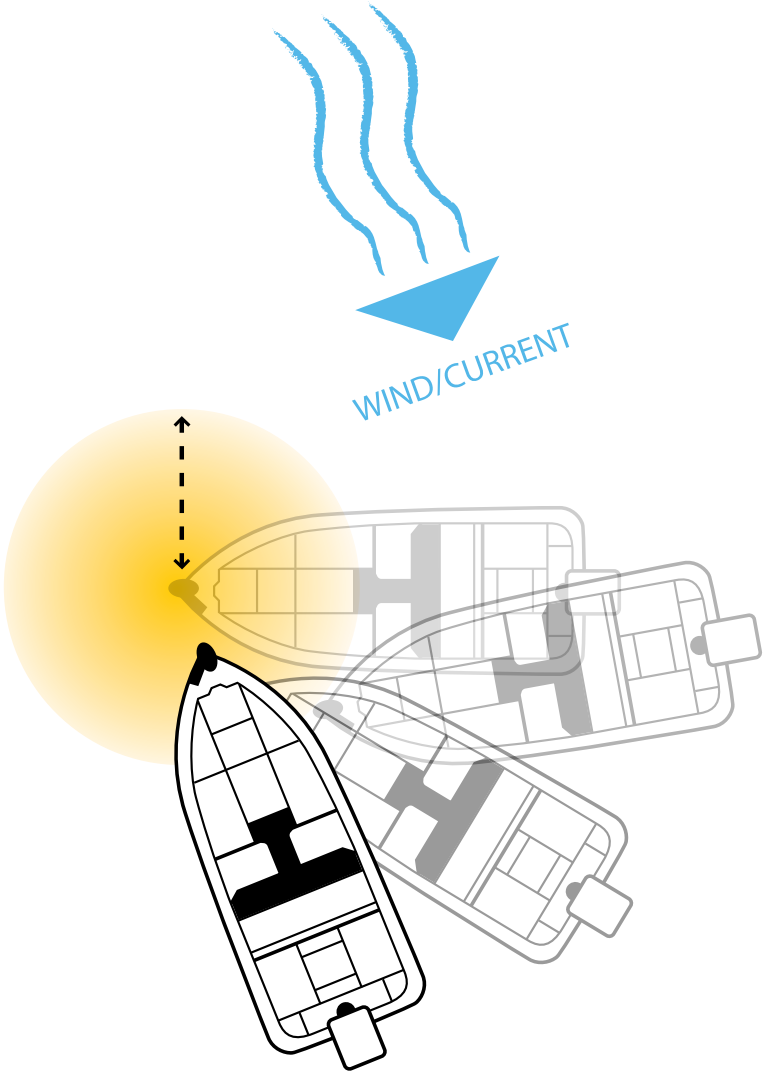
SPOT LOCK

HOW SPOT LOCK WORKS

SPOT LOCK

Spot Lock uses a single point as a reference for the spot you want to stay on. This point is recorded and stored into one of the six memory locations when the **Spot Lock** button is pushed. Around the **Spot Lock** location i-Pilot uses an arrival circle to determine prop speed and direction. If i-Pilot sees it is within the circle, it will adjust the motor speed to zero. If i-Pilot sees it is outside of the circle, it will control motor speed in an attempt to get the boat back into the circle.



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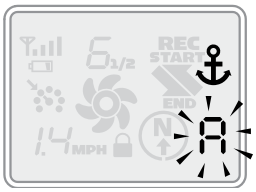
SPOT LOCK

ENGAGING SPOT LOCK

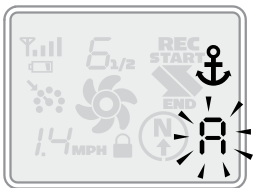


1. Press on the remote.
2. The Memory Location icon will flash on the remote LCD for three seconds, allowing you to choose a memory location by pressing or . Pressing again or waiting for three seconds accepts the memory location.

DISENGAGING SPOT LOCK

1. To disengage **Spot Lock** press any of these buttons: or .

RE-ENGAGE A SAVED SPOT LOCK LOCATION



1. Manually navigate the boat to within a quarter mile of the saved **Spot Lock** location. Due to safety reasons, i-Pilot will not re-engage a saved **Spot Lock** location greater than a quarter mile away.
2. Press on the remote.
3. The Memory Location icon will flash on the remote LCD for three seconds allowing you to choose a memory location by pressing or . Pressing again or waiting for three seconds accepts the memory location.

SPOT LOCK ESCAPE

1. If the **Spot Lock** button is accidentally hit, press or any manual navigation button within three seconds to cancel the command.

FOOT PEDAL OPERATION

- Pressing any foot pedal button will disengage **Spot Lock**.
- The momentary button on the foot pedal will not function when **Spot Lock** or **Spot Lock** Recall is engaged.

USING SPOT LOCK WITH OTHER I-PILOT FUNCTIONS

Since **Spot Lock** takes over full control of the motor, it cannot be used in combination with other i-Pilot functions.

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CRUISE CONTROL

HOW CRUISE CONTROL WORKS

CRUISE CONTROL

i-Pilot automatically controls the motor speed to maintain a constant GPS speed.

ENGAGING CRUISE CONTROL

1. Press on the remote.
2. The current GPS speed will flash, displaying your current speed as the target GPS speed on the remote LCD for three seconds.
3. Press or to increase or decrease the target speed or press again to engage **Cruise Control** immediately.

DISENGAGE CRUISE CONTROL

1. Pressing will disengage **Cruise Control**.

ADJUSTING TARGET SPEED WITH CRUISE CONTROL ENGAGED

1. With **Cruise Control** engaged press or to adjust the target speed by 0.1 MPH increments.

FOOT PEDAL OPERATION

- Adjusting the motor speed or pressing the CON button from the foot pedal will disengage **Cruise Control**.

USING CRUISE CONTROL WITH OTHER I-PILOT FUNCTIONS

Cruise Control can be used in combination with **Advanced AutoPilot**, **AutoPilot**, **Track Recording**, and **Track Playback**.

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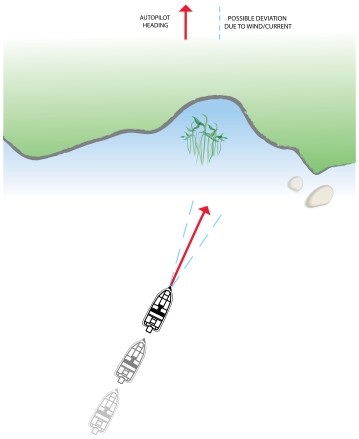
AUTOPILOT

HOW AUTOPILOT WORKS

Two different versions of **AutoPilot** are available: **Advanced AutoPilot** and **AutoPilot**. There are distinct differences between the two AutoPilots and how they control your boat.

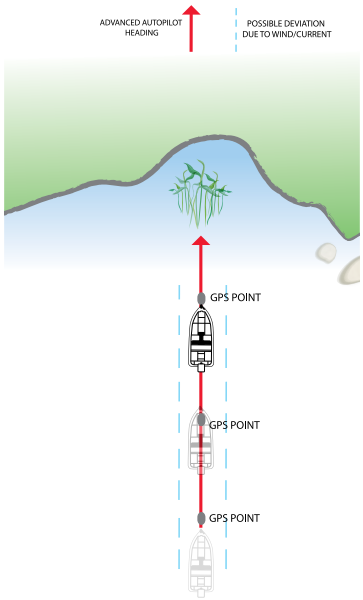
AUTOPILOT

AutoPilot uses an internal compass to provide heading lock. When **AutoPilot** is on, it keeps the motor pointed in the same compass direction. If a manual steering correction is made, **AutoPilot** locks onto the new compass heading to which the boat was steered. This method of heading tracking does not take into account external forces such as a side wind or currents, which can allow side drift.



ADVANCED AUTOPILOT

Advanced AutoPilot not only uses compass heading but also GPS signal data to correct for cross winds, current and other external forces to keep the boat on a straight line. When **Advanced AutoPilot** is turned on, it generates a set of GPS points in a straight track line in the heading direction. i-Pilot now navigates to each individual point on this track line. When the user steers to a new heading, a new track line of GPS points are laid down in the new heading direction.



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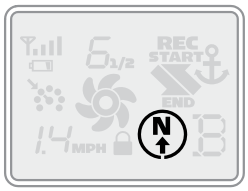
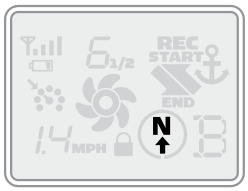
ENGAGING ADVANCED AUTOPILOT AND AUTOPILOT

1. To engage **Advanced AutoPilot**, press once. To engage **AutoPilot**, press and hold for two seconds.
2. The **Advanced AutoPilot** or **AutoPilot** icon will be displayed on the remote LCD.
3. To adjust desired heading, manually steer motor to new heading. i-Pilot will lock onto new heading.



Advanced AutoPilot



AutoPilot

WHICH AUTOPILOT DO I USE AND WHEN?

With all the external variables, this question can be difficult to answer. Both **AutoPilots** have their benefits based on the type of fishing and bait presentation desired.

Advanced AutoPilot will keep the boat on a true straight path in most conditions. When very extreme conditions exists such as very strong winds or current, the trolling motor may not have enough power to control the boat smoothly. In these extreme cases it may be best to use **AutoPilot** and let the boat move with the wind or current if the motor is not powerful enough to overcome it.

AutoPilot helps you maintain a constant heading but does not compensate for wind or currents.

Both **Advanced AutoPilot** and **AutoPilot** are valuable tools the fisherman can use for accurate and precise bait presentation. We highly recommend getting on the water and trying both **Advanced AutoPilot** and **AutoPilot** in various fishing situations and applications. With experimentation and time you will find which **AutoPilot** works best for you in a given situation.

FOOT PEDAL OPERATION

- **Advanced AutoPilot** can be turned on by pressing the AP button on the foot pedal.
- **AutoPilot *cannot*** be turned on by using the AP button on the pedal.

USING ADVANCED AUTOPILOT AND AUTOPILOT WITH OTHER I-PILOT FUNCTIONS

Advanced AutoPilot and **AutoPilot** can be used in combination with **Cruise Control** and while recording a track.

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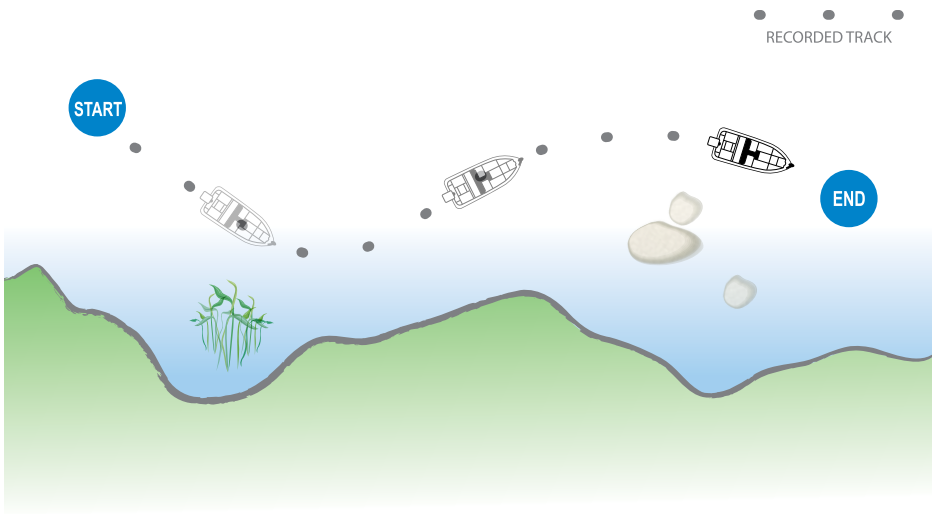
TRACK RECORDING / PLAYBACK

HOW TRACK RECORDING AND PLAYBACK WORK

TRACK RECORDING AND PLAYBACK

When the **Track Record** button is pressed, i-Pilot starts to record GPS position data in the form of track points. The distance between these points varies based on the speed of the boat and the GPS signal strength. The very first track point recorded is called the start. The last point recorded is called the end. i-Pilot sees a recorded track as a series of these track points. When a **Track to Start** or **Track to End** button is pushed, i-Pilot will navigate to the nearest track point. Once this nearest track point is reached, it will then follow the track points in sequence back to either the start or end based on which button was pressed. Once the end or start track point is reached, i-Pilot automatically exits from the **Track to Start** or **Track to End** function. During track playback, i-Pilot takes control over all steering functions; speed can be manually controlled or the **Cruise Control** function can also be used. The motor speed must be set high enough in order to stay on the track given wind, current and other external forces.

i-Pilot can also pause the recording of a track. When the recording is paused, i-Pilot temporarily stops recording any new track points. When track recording is resumed, i-Pilot records new track points. Due to the nature of pausing a recording, there may be a large separation distance between two track points or two track points lying on top of one another where the pause occurred. This can cause erratic motor steering therefore it is very important to know where the pause button was pressed and to resume the recording just ahead of that location. If while paused, the separation distance exceeds a quarter mile, the recording will automatically stop.



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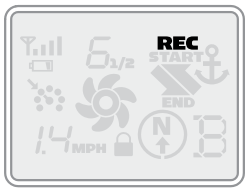
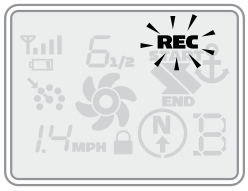
RECORDING A TRACK

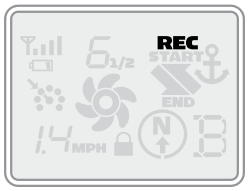


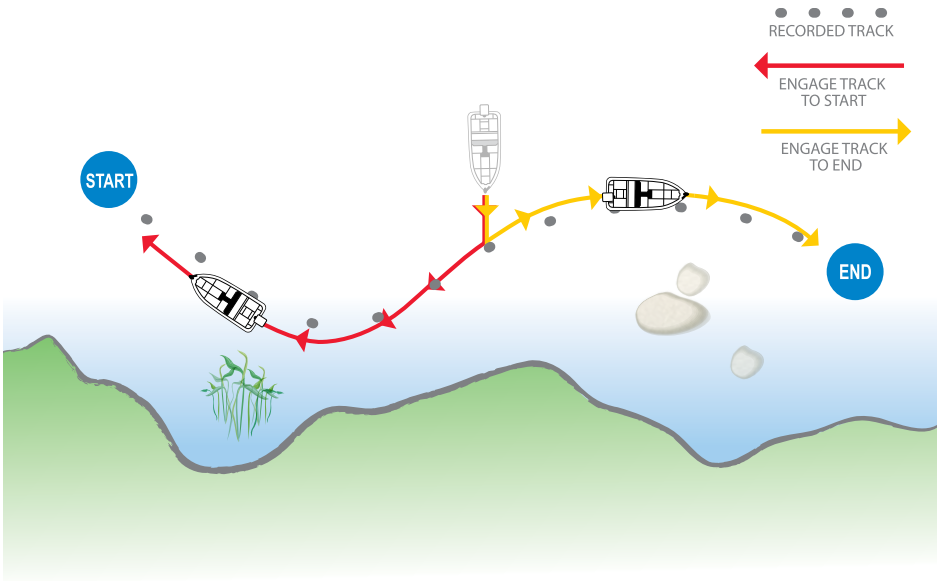
1. Press R on the remote.
2. The Memory Location icon will flash on the remote LCD for three seconds, allowing you to choose a memory location by pressing + or −. Pressing R again or waiting for three seconds accepts the memory location.
3. The REC icon will be displayed on the remote LCD. Remember this will be the start point on the track.
4. Navigate the boat along the desired path or course. **AutoPilot** and/or **Cruise Control** can be used while recording a track.
5. Press R on the remote again to stop the recording. The recording will end automatically if the two-mile distance limit is reached for the track or if one of the following buttons are pressed: anchor, undo, START or END.

PAUSE AND RESUME A RECORDING



1. While recording a track press ⏸.
2. The record icon will flash on the remote LCD.
3. i-Pilot has now paused the recording of the track.
4. If the boat moves farther than a quarter mile from where ⏸ was pressed, the recorded track will be ended and saved to the memory location previously selected.
5. When ready to resume recording, navigate the boat just ahead of where ⏸ was pushed. Failure to do this may cause erratic play back of a track.
6. Push ⏸.
7. The record icon will stop flashing on the remote LCD.
8. i-Pilot is now recording again and adding to the track that was paused.





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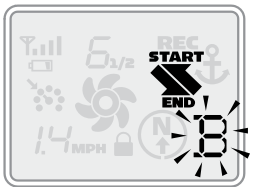
REPLAYING A TRACK (TRACK TO START / TRACK TO END)

1. Manually navigate the boat to within a quarter mile of the saved track. Due to safety reasons, i-Pilot will not re-engage a saved track greater than a quarter mile away.
2. Press START or END on the remote.
3. The Memory Location icon will flash on the remote LCD for three seconds, allowing you to choose a memory location by pressing + or −. Pressing the button pressed in step 2 again or waiting for three seconds accepts the memory location.
4. Adjust motor speed to desired setting to engage and navigate track automatically.



RECORD, TRACK TO END AND TRACK TO START ESCAPE

1. If R START or END is accidentally hit, press ⏸ within three seconds on the remote to cancel the command.

FOOT PEDAL OPERATION

- Steering left or right and turning **Advanced AutoPilot** on with the foot pedal will disengage **Track to Start** or **Track to End**.

i-Pilot TIPS

You can switch directly between Track to Start and Track to End. This allows you to concentrate on productive sections of a track.

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USING YOUR FOOTPEDAL

FOOT PEDAL FEATURES

TO ADJUST MOTOR SPEED

Turn the speed knob clockwise to increase speed and counter-clockwise to decrease speed.

TO OPERATE THE MOTOR IN CONTINUOUS MODE

Press the Mom/Off/Con switch on the side of the pedal to the Con position.

TO OPERATE THE MOTOR IN MOMENTARY MODE

Press the Mom/Off/Con switch on the side of the pedal to the Mom position. A toe touch to the Momentary button on the foot pedal will now turn the motor on. Re[illegible]ng dow[illegible]ward [illegible]ce on the Momen[illegible]y button will turn the motor off.

TO TURN LEFT OR RIGHT

Push the toe [illegible] of the foot pedal do[illegible] right and push the heel end of the foot pedal down to turn left. The indicator on the motor head[illegible]ows the [illegible]ction of [illegible] motor. The motor will not maintain its own heading. You must keep your foot on the pedal to control [illegible]g during operatio[illegible]

TO REVERSE THE [illegible]TOR

The motor always tra[illegible]s in the direction of the indicator. You can reverse the direction of the motor by turning the motor 180° from straight ahead.

CAUTION:

- **Switch the mom/off/con switch to "off" when not in use. If the motor control is left on and the propeller rotation is blocked, severe motor damage can result.**

FPO

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MANUAL STOW PROCEDURE

In the event of a power loss or failure the following procedure shall be used to stow the motor for transport to a service center.

1. Remove Right hand sideplate

2. Using a standard screwdriver pop manual tilt knob off of tilt plates to decouple the tilt motor and tilt bracket (see figure X)
3. Pull manual trim handle located on trim housing out until shaft can be manually trimmed up.

4. Stow motor by manually tilting and trimming in until lower unit is on the ramps.

5. Secure lower unit onto the ramps using the provided emergency strap.

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ADJUSTMENTS

ADJUSTING THE LIFT BELT

Over the course of time the main lift belt may need small adjustments to maintain belt tension. Using a 1/8" allen wrench turn the socket head cap screw on the bottom of the control head (see figure X) until belt is finger tight. (should be able to force finger under belt.

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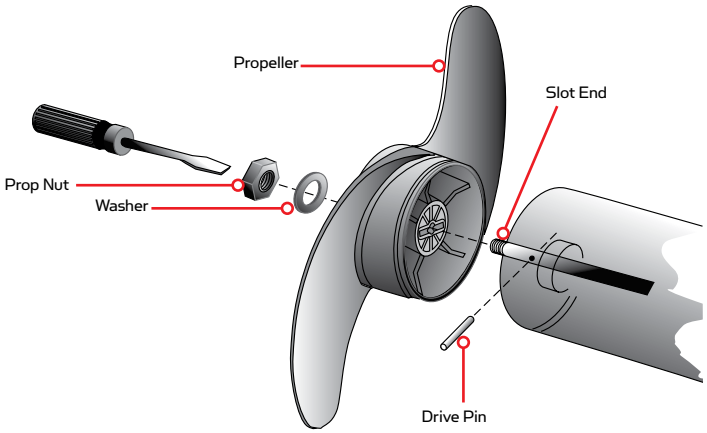
SERVICE & MAINTENANCE

PROPELLER REPLACEMENT

TOOLS AND RESOURCES REQUIRED:

- 7/16” Box End Wrench
- Screwdriver (optional)



CAUTION:
Disconnect the motor from the battery before beginning any prop work or maintenance.
NOTE: The propeller on your motor may differ from the one pictured.

1. Disconnect the motor from all sources of power prior to changing the propeller.
2. Hold the propeller and loosen the prop nut with pliers or a wrench.
3. Remove the prop nut and washer. If the drive pin is sheared or broken, you will need to hold the shaft stationary with a blade screwdriver pressed into the slot on the end of the shaft.
4. Turn the old prop to horizontal (as illustrated) and pull it straight off. If drive pin falls out, push it back in.
5. Align the new propeller with the drive pin.
6. Install the prop washer and prop nut.
7. Tighten the prop nut 1/4 turn past snug [25-35 inch lbs.] Do not over tighten as this can damage the prop.

GENERAL MAINTENANCE

1. After use, the entire motor should be rinsed with freshwater, then wiped down with a cloth dampened with an aqueous based silicone spray. This series of motors is not equipped for saltwater exposure.
2. The propeller must be inspected and cleaned from weeds and fishing line after every use.
   Fishing line and weeds can get behind the prop, damage the seals and allow water to enter the motor.
3. Verify the prop nut is secure each time the motor is used.
4. To prevent accidental damage during transportation or storage, disconnect the battery whenever the motor is off of the water. For prolonged storage, lightly coat all metal parts with an aqueous based silicone spray.
5. For maximum battery life recharge the battery(s) as soon as possible after use. For maximum motor performance restore battery to full charge prior to use.
6. Keep battery terminals clean with fine sandpaper or emery cloth.
7. The propeller is designed to provide weed free operation with very high efficiency. To maintain this top performance, the leading edge of the blades must be kept smooth. If they are rough or nicked from use, restore to smooth by sanding with fine sandpaper.

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FAQ

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TROUBLESHOOTING

1. Motor fails to run or lacks power:
   - Check battery connections for proper polarity.
   - Make sure terminals are clean and corrosion free. Use fine sandpaper or emery cloth to clean terminals.
   - Check battery water level. Add water if needed.
2. Motor loses power after a short running time:
   - Check battery charge. If low, restore to full charge.
3. Motor is difficult to steer:
   - Check steering cables for proper tension. Adjust as necessary.
4. You experience prop vibration during normal operation:
   - Remove and rotate the prop 180°. See removal instructions in the Propeller Replacement Section.
5. Experiencing interference with your fishfinder:
   - You may, in some applications, experience interference in your depth finder display. We recommend that you use a seperate deep cycle marine battery for your trolling motor and that you power the depth finder from the starting/cranking battery. If problems still persist, call our service department at 1-800-227-6433.
6. Motor fails to deploy:
7. Motor fails to stow:
8. Motor fails to trim:

NOTE: For all other malfunctions, visit an authorized service center. You can search for an Authorized Service Center in your area by visiting our Authorized Service page, found online at minnkotamotors.com, or by calling our customer service number at 800-227-6433.

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FOR FURTHER TROUBLESHOOTING AND REPAIR

We offer several options to help you troubleshoot and/or repair your product. Please read through the options listed below.

FREQUENTLY ASKED QUESTIONS

We have FAQs available on our website to help answer all of your Minn Kota questions. Visit minnkotamotors.com and click on "Frequently Asked Questions" to find an answer to your question.

CALL US (FOR U.S. AND CANADA)

Our consumer service representatives are available Monday – Friday between 7:00 a.m. – 4:30 p.m. CST at 800-227-6433. If you are calling to order parts, please have the 11-character serial number from your product, specific part numbers, and credit card information available. This will help expedite your call and allow us to provide you with the best consumer service possible. You can reference the parts list located in your manual to identify the specific part numbers.

EMAIL US

You can email our consumer service department with questions regarding your Minn Kota products. To email your question, visit minnkotamotors.com and click on "Support".

AUTHORIZED SERVICE CENTERS

Minn Kota has over 300 authorized service centers in the United States and Canada where you can purchase parts or get your products repaired. Please visit our Authorized Service Center page on our website to locate a service center in your area.

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PARTS DIAGRAM

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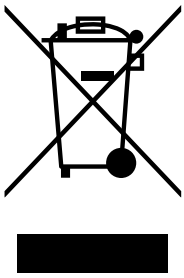
COMPLIANCE STATEMENTS

WEEE DIRECTIVE:

EU Directive 2002/96/EC "Waste of Electrical and Electronic Equipment Directive (WEEE)" impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.

WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as fixed or temporary installation in transportation vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.



This symbol (WEEE wheelie bin) on product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Johnson Outdoors Inc. will mark all EEE products in accordance with the WEEE Directive. It is our goal to comply in the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirement do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.

DISPOSAL:

Minn Kota motors are not subject to the disposal regulations EAG-VO (electric devices directive) that implements the WEEE directive. Nevertheless never dispose of your Minn Kota motor in a garbage bin but at the proper place of collection of your local town council.

Never dispose of battery in a garbage bin. Comply with the disposal directions of the manufacturer or his representative and dispose of them at the proper place of collection of your local town council.

WARNING:
This product contains chemical(s) known to the state of California to cause cancer and/or reproductive toxicity.

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FCC Compliance

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.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifcations not expressly approved by Johnson Outdoors Marine Electronics, Inc. could void the user's authority to operate this equipment.

This product meets the applicable Industry Canada's license exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent materiel est conforme aux CNR exempts de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences, et (2) cet appareil doit accepter toute interférence, y compris celles susceptibles de provoquer le fonctionnement du dispositif.

Note: 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 of 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 receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

To minimize RF exposure, maintain at least 20cm (7.87in.) of separation between your body and the motor.

- IC: 4397A-ULTERRAIP15
- FCC ID: T62-ULTERRAIP15

- IC: 4397A-ULTERRAIP20
- FCC ID: T62-ULTERRAIP20

Carrier frequency:

US/Canada/Australia:	915MHz	European:	864MHz
	918MHz		867MHz
	921MHz		870MHz

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RECOMMENDED ACCESSORIES

ON-BOARD & PORTABLE BATTERY CHARGERS

Stop buying new batteries and start taking care of the ones you've got. Many chargers can actually damage your battery over time – creating shorter run times and shorter overall life. Digitally controlled Minn Kota chargers are designed to provide the fastest charge that protect and extend battery life.

MK345PC

MK212D

MK105P

TALON SHALLOW WATER ANCHOR

Talon deploys faster, holds stronger and runs quieter than any other shallow water anchor. Available in depths up to 12' and bold color options, it boasts an arsenal of features and innovations that no other anchor can touch:

- Vertical, multi-stage deployment
- User-Selectable Anchoring Modes
- 2x Anchoring Force
- Fast Deploy
- Auto Up/Down
- Triple Debris shields*
- Built-In Wave Absorption
- Noise Dissipation
- Versatile Adjustments

*available on 10' and 12' models only

MINN KOTA ACCESSORIES

We offer a wide variety of trolling motor accessories, including:

- 60-Amp Circuit Breaker
- Mounting Brackets
- Stabilizer Kits
- Extension Handles
- Battery Connectors
- Battery Boxes
- Quick Connect Plugs

For a complete listing of Minn Kota accessories, visit minnkotamotors.com

Follow us:

minnkotamotors.com

Minn Kota Consumer & Technical Service
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Mankato, MN 56001

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