#### Skip to content

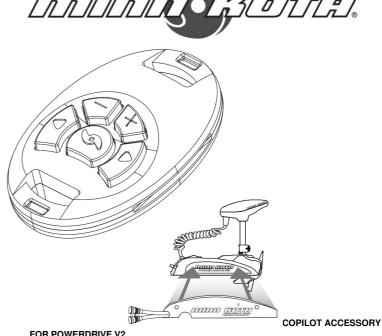
## Manuals+

User Manuals Simplified.

# MINN-KOTA CoPilot for PowerDrive V2 User Manual



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FOR POWERDRIVE V2 USER 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 choosing Minn Kota. We believe that you should spend more time fishing and less time positioning your boat. That's why we build the smartest, toughest, most intuitive marine products on the water. Every aspect of a Minn Kota product is thought out and rethought until it's good enough to bear our name. Countless hours of research and testing provide you the advantages of a Minn Kota product that can truly take you "Anywhere. Anytime." We don't believe in shortcuts. We are Minn Kota. And we are never done helping you catch more fish.

# REMEMBER TO KEEP YOUR RECEIPT AND IMMEDIATELY REGISTER YOUR PRODUCT.

A registration card is enclosed or you can complete registration on our website at minnkotamotors.com.

**NOTE:** Do not return your Minn Kota product 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.

## 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.

Serial number formats may include MKAD1234567 or J123MK12345

The serial number on your CoPilot Remote is located on the inside of the receiver panel.



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## TWO-YEAR LIMITED WARRANTY

## WARRANTY ON MINN KOTA COPILOT ACCESSORIES

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 CoPilot 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 & 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 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 <a href="mailto:service@minnkotamotors.com">service@minnkotamotors.com</a> 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 fi nds 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.

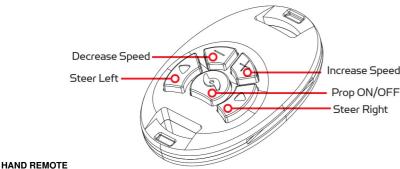
NOTE: Do not return your Minn Kota product to your retailer. Your retailer is not authorized to repair or replace products.

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.

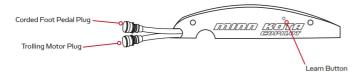
Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights which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

## **FEATURES**

## SYSTEM COMPONENTS



## COPILOT RECEIVER



# INSTALLATION

## TOOLS AND RESOURCES REQUIRED:

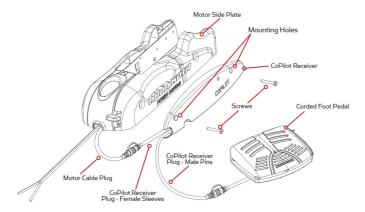
• #2 Phillips Screwdriver

NOTE: If the trolling motor is currently mounted on a boat, the boat should be stabilized to avoid unexpected movement. **CAUTION:** Disconnect power to the trolling motor before beginning installation.

# INSTALLING YOUR RECEIVER

- 1. Using the screwdriver, remove the two  $1/4-20 \times 5/8$ " side plate screws from the right side-plate of the motor.
- 2. Position the CoPilot receiver on the outside of the right side plate (shown in the figure below) so that the receiver mounting holes are aligned with the side plate mounting holes.
- 3. Using the new 1/4-20 x 1 3/4" mounting screws provided, insert the screws through the receiver and side plate into the original side plate screw holes. Tighten the two screws. Do not over tighten.
- 4. Connect the motor cable plug (previously connected to the corded foot pedal) to the CoPilot receiver cable plug that has the female (sleeve) receptacles. If desired, connect the corded foot pedal plug end to the CoPilot receiver cable plug that has the male pins.

NOTE: Do not apply lubricant or any type of grease to trolling motor connectors.



## **USING THE COPILOT**

## **GENERAL OPERATION**

## USING THE HAND REMOTE WITH THE CORDED FOOT PEDAL

- When the corded foot pedal's MOM-CON switch is in the CON position or when the Momentary On switch is held, the receiver WILL NOT RESPOND to any remote commands. When remote commands are received, the receiver will emit an audio chirp. This will indicate that the remote is functioning properly although a corded foot pedal switch is active and is overriding the remote.
- When the MOM-CON switch is in the MOM position, the angler may begin using the remote at any time.
- As soon as any remote button is pressed, the initial speed setting will be approximately the same as the corded foot pedal's speed control position. However, the prop will not
  automatically turn on until the remote's prop on/off button is pressed.
- Pressing the corded foot pedal momentary switch or steering switches will override the remote and receiver function and control will automatically go to the corded foot pedal.

  The prop speed will also revert to the current position of the speed control on the corded foot pedal.

## USING THE COPILOT WITHOUT THE CORDED FOOT PEDAL

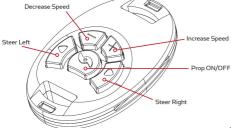
• If the foot pedal is not being used, the CoPilot receiver will always react to any commands from the CoPilot remote.

#### REMOTE COMMANDS

There are fi ve buttons on your CoPilot:

• PROP ON/OFF

Turns the propeller on or off . Press the button once to turn the propeller ON; press button a second time to turn it OFF. The button does not need to be held down.



## • STEER LEFT/STEER RIGHT

Causes the motor to turn in the desired direction as long as the button is held down. If a steering button is held for more than seven seconds, the steering will automatically stop until the button is pressed again.

## • INCREASE SPEED/DECREASE SPEED

Pressing and releasing these buttons causes the speed to increase or decrease by one level. The speed is adjustable from level 0-10. At level 0, the prop will not turn.

- In audio mode 2, an audible beep is heard for each step change in speed. Attempting to go higher than speed 10 or lower than speed 0 will result in the speed not changing and no beep will be heard. See the Audio Mode section for more information.
- If the receiver senses no foot pedal or remote operation for 1 hour, the remote speed setting is automatically set to zero. This helps prevent unintentional activation of the propeller if the PROP ON/OFF remote button is inadvertently pressed.

## AUDIO MODES

There are three receiver audio modes available. The unit is factory set to Audio Mode 2. To switch from one audio mode to another, simultaneously press and hold the increase and decrease speed buttons for one second. The receiver will respond with 1, 2 or 3 audible beeps indicating the corresponding receiver audio mode change.

- Audio Mode 1 = All of the normal audible sounds mentioned in this owners manual, but no audible beeps for speed increase / decrease or prop on /off .
- Audio Mode 2 = Same as audio mode 1 plus an audible beep for speed increase /decrease and prop on/off .
- Audio Mode 3 = Same as audio mode 2 plus the prop on audible click every few seconds.

NOTE: When the corded foot pedal is in control and the propeller is on, the prop on indicator click will be heard if the receiver is set to audio mode 3.

AUDIO PATTERN	WHAT CONDITION CAUSES IT	OCCURS IN WHICH AUDIO MODE
1 Beep	Pressing the INCREASE SPEED or DECREASE SPEED button.	Modes 2 and 3
1 Beep	Pressing the PROP ON/OFF button to turn the prop on.	Modes 2 and 3
2 Beeps	Pressing the PROP ON/OFF button to turn the prop off.	Modes 2 and 3
Single tick every 1.5 seconds	When the prop is active including when speed is set to 0.	Mode 3
1 Beep	Switching to audio mode 1 (pressing the INCREASE SPEED and DECREASE SPEED simultaneously for 1 second).	All
2 Beeps	Switching to audio mode 2 (pressing the INCREASE SPEED and DECREASE SPEED simultaneously for 1 second).	All
3 Beeps	Switching to audio mode 1 (pressing the INCREASE SPEED and DECREASE SPEED simultaneously for 1 second).	All
1 Chirp	Every time the receiver is powered up and there is at least one remote ID learned.	All
2 Second long beep	Every time the receiver is powered up and there are no remote IDs learned.	All
5 Beeps	Foot pedal speed control is moved after speed has been adjusted with the remote.	All
Steady tone	Heard while holding down the learn button on the receiver.	All
4 Beeps	After a remote button is pressed while the receiver learns its ID.	All
Ten second warbling sound that transitions into a steady tone	Heard during the process used to clear all stored remote IDs. After the learn switch is released, a 2-second long beep will be heard.	All
1 Long beep, 2 short beeps, pause (repeat)	Powered up with MOM/CON in the CON (or MOM switch held) when the foot pedal is moved to momentary, the power-up audio will be heard.	<sup>O</sup> All

## ADDING/REMOVING REMOTES

The CoPilot receiver in this kit has already "learned" the ID number of the remote it is packaged with. The receiver must "learn" the ID number of any additional remote(s) that you intend to use. When the receiverlearns the ID number of a remote, that ID number is retained in the receiver even when the motor is disconnected from its power source.



To "learn" the ID number of additional remotes, follow these steps:

- 1. Press and hold the LEARN button located on the side of the receiver (the receiver will emit a continuous tone). A small, blunt object such as a pen or screwdriver must be used to depress the LEARN button.
- 2. Press any button on the remote (the receiver will beep 4 times confirming that it has "learned" the ID number of the remote and that the programming is valid and complete.)

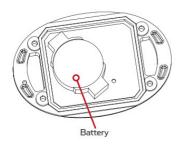
NOTE: "Re-learning" the ID number of the same remote will not overwrite previously "learned" remotes.

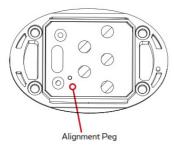
NOTE: If the receiver has "learned" the ID number of ten remotes, "learning" an eleventh remote will overwrite the first remote. To erase all stored remote ID numbers from the receiver, follow these steps:

- 1. Remove power from the receiver by unplugging the receiver from the motor.
- 2. Press and hold the LEARN button and power up the receiver by plugging it back into the motor. Hold the LEARN button down for 10 seconds. During this time the receiver audio will emit a warble sound, slowly transition to a constant beep and then shut off.
- 3. Release the LEARN button and the receiver will reboot. The receiver will emit a 2-second long beep indicating memory is empty. This audio pattern will occur each time the receiver powers up until a remote ID number is learned.

## REPLACING THE BATTERY

- 1. Temporarily ground yourself by touching a grounded metal object in order to discharge any static electricity in your body.
- 2. Remove the four screws on the bottom of the remote case.
- 3. Separate the case halves to access the circuit board.
- 4. Pull back the retaining fingers of the battery holder to remove the battery (underside of circuit board).
- 5. Install the new battery with the positive (+) side of the battery facing up (away from the circuit board). Ensure the battery is snapped securely in place.
- 6. Reassemble the remote. Note that the alignment peg in the remote case must line up with the corresponding alignment hole in the circuit board. Also, note that the keypad must be positioned so that the buttons are over the end of the circuit board opposite from the alignment peg and hole. Reinstall the four case screws and tighten them as required.





is used.

NOTE: The replacement battery must be a model cr2032 coin cell type. It is strongly recommended that a name brand battery

## FREQUENTLY ASKED QUESTIONS

## Q. Are there any on/off switches?

A. The receiver is always powered up whenever the motor is connected to the battery or batteries. The remote automatically goes into a low power "sleep mode" whenever there are no buttons being pressed.

- Q. Does the remote float?
- A. Yes.
- Q. Can other CoPilot users control my CoPilot if they get too close?
- A. No. Each remote has its own unique ID number. Your CoPilot receiver will not respond to commands from other "unlearned" remotes.
- Q. How many remote ID numbers can my receiver "learn"?
- A. 10.
- Q. What happens if my receiver has 10 different remote ID numbers "learned" and I attempt to "teach" it another one?
- A. The first remote ID number that was learned will be overwritten (first in, first out).
- Q. How long should the battery in the remote last?
- A. Under normal use and conditions, the battery should last for at least two regular fishing seasons.
- Q. Where can I purchase additional remotes?
- A. Through any Minn Kota retail outlet.

# TROUBLESHOOTING & REPAIR

CAUSE	EFFECT	SOLUTION
	The battery is discharged.	Replace battery.
	Receiver may not have "learned" the ID number of the remote.	Remote needs to be learned. See "Adding/ Removing Remotes" to learn the remote ID number.
Remote is not transmitting.	With the foot pedal connected, the MOM- CON switch is in the CON position. An audio response will be heard if a button is pressed with the foot pedal in the CON position.	The foot pedal switch must be placed in the MOM position. The receiver will not accept any commands from the remote with the switch in the CON position.
	If remote has been taken apart, the keypad and top case may have been installed backwards.	Take remote apart (see "Replacing the Battery") and reinstall case halves with the proper orientation.
When receiver is nowered up, it sounds a been pattern (1	The foot pedal MOM-CON switch is in the CON position. receiver is powered up, it sounds a beep pattern (1 eep, 2 short beeps, pause, repeat).  The foot pedal MOM-CON switch is in the CON position. the MOM position. The beeping sound we the switch is placed in the MOM position.	the MOM position. The begoing sound will continue until
long beep, 2 short beeps, pause, repeat).		the switch is placed in the MOM position.
The prop is not turning but the PROP ON audio tick is still	Prop Speed is set at "0".	Increase the prop speed above "0"
going.	PROP ON tick occurs only in Audio Mode 3	Switch Audio Mode to either Audio 1 or 2. See "Audio Modes".

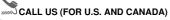
# FOR FURTHER TROUBLESHOOTING AND REPAIR

We off er 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.



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.



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.

## **COMPLIANCE STATEMENTS**

## **ENVIRONMENTAL COMPLIANCE STATEMENT:**

It is the intention of JOME to be a responsible corporate citizen, operating in compliance with known and applicable environmental regulations, and a good neighbor in the communities where we make or sell our products.

#### 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 fi xed 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.

FCC ID: M05COPLT IC: 4397A-M05COPLT MODEL: COPILOT

## FCC AND INDUSTRY CANADA COMPLIANCE STATEMENT:

This device complies with FCC Rules Part 15 and Industry Canada RSS-210. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference, including interference that may cause undesired operation of the device

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Per FCC Part 15.21. The FCC and IC label can be found on the back side of the remote.

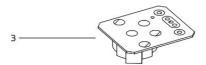
# RADIO OPERATION:

- Frequency band: 433.92 MHz
- Maximum RF power transmitted: +7 dBm

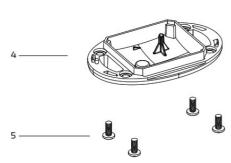
# PARTS LIST & DIAGRAM







ITEM	φтγ	PART NUMBER	DESCRIPTION
1	1	2372500	CASE, COVER, TRANSMITTER ASY
2	1	2375110	KEYPAD, TRANSMITTER ASSY
3	1	N/A	CTRL BOARD, TRANS. ASSY
4	1	2372505	CASE, BOTTOM, TRANSMITTER ASSY
5	4	2373440	SCREW-#4-24 X 1/4



## 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.







# 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 including camo, 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

# 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





 $\underline{minnkotamotors.com}$ 

Minn Kota Consumer & Technical Service Johnson Outdoors Marine Electronics, Inc. PO Box 8129 Mankato, MN 56001

> 121 Power Drive Mankato, MN 56001 Phone (800) 227-6433



Fax (800) 527-4464

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# Documents / Resources



MINN-KOTA CoPilot for PowerDrive V2 [pdf] User Manual MINN-KOTA, CoPilot, PowerDrive, V2

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