## Powerdrive Advanced GPS Upgrade Kit

Always wear safety glasses and gloves. Disconnect all power to the trolling motor before beginning any work or maintenance. Lakeside Marine and Service is not responsible for any damage due to improper rigging or installation. If you do not have the skills, experience and tools to perform the following maintenance and repairs, we recommend you either drop off your trolling motor or ship your trolling motor to Lakeside Marine and Service to complete the installation. Or contact our Technical Service Department by email at <a href="mailto:support@lakesidemarineandservice.com">support@lakesidemarineandservice.com</a> or, by calling/texting 815 246 2535.

1. Remove 4 screws that hold the upper cover to the lower cover on the top of the trolling motor shaft.



- 2. Remove top cover to expose wiring.
- 3. Disconnect all wiring quick connections. (If there is an autopilot board and compass this can be removed as it will not be used again)



4. Remove insert plug from lower unit cover



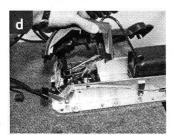
- 5. If your motor is 2017 to present, skip this step. Slide out coil cord from lower unit cover.
- 6. If your motor is 2017 to present, skip this step. Remove bolt and nut that holds the lower cover to the shaft.



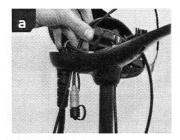
- 7. If your motor is 2017 to present, skip this step. Remove lower cover from shaft.
- 8. If your motor is 2017 to present, skip this step. Install new lower cover provided in the kit onto shaft.
- 9. If your motor is 2017 to present, skip this step. Reinstall bolt through new lower cover, look down shaft as you do this to ensure wires are not damaged as you reinstall the bolt. Secure bolt with nut.
- 10. If your motor is 2017 to present, skip this step. Reinstall the coil cord in the new lower cover.
- 11. If your motor is 2017 to present, skip this step. Reconnect the brown ground wire if there is a built in transducer (use shrink wrap over connection)
- 12. If your motor is 2017 to present, skip this step. Twist the red and black wires coming from the coil cord three times and the red and black wires coming out of the shaft three times. Reconnect the black to the black and the red to the red wires and slide blue covers over connections ensuring the exposed metal connections are

completely covered and not touching each other. Twisting the wires helps eliminate electrical interference that can interfere with the iPilot head. If there is a US2 connection, reconnect that together. If there are any other colored wires (yellow, green etc. coming out of the coil cord use the shrink wrap provided to shrink wrap those wires ends.

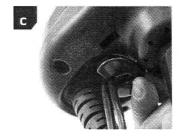
13. Remove Side Plates and Center Housing by removing the 4 screws securing the side plate (2 on each side). Then remove center housing exposing the main control board.



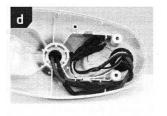
14. Route the Advanced GPS Controller Cable and Network Cable from the new Advanced GPS Head Controller down the opening that the insert plug was removed from. Continue feeding the Advanced GPS Controller Cable down the interior of the coil cord. If an ethernet cable was purchased it can be fed through the interior of the coil cord and connected to the quick connect coming from the Advanced GPS Head Controller. The other end of the ethernet cable will be routed to either a compatible Humminbird Fish Finder or a Humminbird 5 port switch. In order for the Advanced GPS Head Controller to communicate with the compatible depth finder it must have the latest update installed.



15. Install the insert plug that was included with this kit.

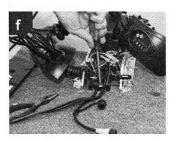


16. If Autopilot was removed, position the wires at the base of the control box next to the insert plug. Verify all wires are routed as low as possible in the control box. Place the Advanced GPS Controller Head on the control box, use the #2 Phillips Screwdriver to install the four screws that secure the Controller Head to the lower control box.





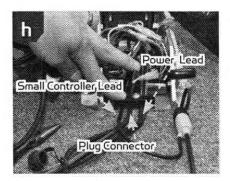
17. Use the #2 Phillips Screwdriver to remove the Strain Relief that holds the foot pedal cable and power lead near the control board.



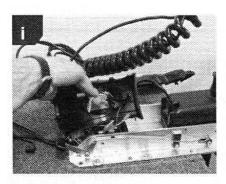
18. If CoPilot was installed complete the removal by using the #2 phillips screwdriver to remove the two screws retaining the Copilot Control Board in the Side Plate.



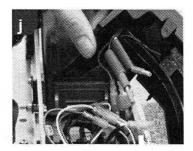
19. Place the power Leadwire in the large cavity in the stain relief, the plug connection from the Control Board in the small cavity closest to the hole the screw passes through, and the small lead with the black and white wires in the final cavity in the strain relief. Install the screw that retains the strain relief.



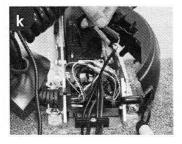
20. Locate the Black and White Wires going to the steering housing, On riptide motors cut the heat shrinks off these connections. Separate the bullet terminals.



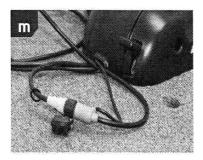
21. Slide two of the included heat shrinks onto the wire leads coming from the steering motor.



22. Connect the bullet terminals from the small controller lead to the terminals coming from the steering housing. The wires should be black to black, white to white and the terminals should mate up properly. Position the heat shrinks that were installed in the previous step and use the heat gun to seal them.



- 23. Place heat shrinks over the exposed black and white leads that were connected to the leads from the steering housing then use the heat gun to seal those connections.
- 24. Reinstall the center cover and side plates. Complete the Installation by connecting the plug connection from the control board to the plug connection from the Advanced GPS Head Controller.



25. If you already have a heading sensor pair to the trolling motor and do a calibration. If not, you can purchase a heading sensor at any time. It is an optional component. A heading sensor gives you the Jog Feature.

26. Pair your remote/phone to the Head Controller (see next pages for applicable pairing options). Once paired use app or full size remote to calibrate the heading sensor and do bow offset if necessary.

## Pairing the Micro Remote

## Pairing the Micro Remote to your Controller

The controller is located in the Control Head on your Minn Kota trolling motor with Advanced GPS Navigation and may pair up to 5 remotes. These five remotes can be a combination of standard remotes and micro remotes. Any additional remotes can be paired using the following steps. Once the maximum number of remotes have been paired, the controller will start replacing the oldest paired remote in memory with the new remote.

- 1. Power up the trolling motor.
- 2. Locate the Pair button at the top of the Control Head.
- Push and hold the Pair button down. A consistent tone will be emitted from the Control Head.

**NOTICE:** Make sure the remote stays within range of the Control Head during the pairing process.

 While holding the Pair button on the Control Head, push and hold the Max Speed button and AutoPilot button on the remote simultaneously. NOTICE: When the remote is being paired to the Controller, the Max Speed button and the AutoPilot button need to be held down simultaneously. Make sure to also hold the Pair button on the Control Head to successfully pair the remote to the controller.

Once successfully paired, 3 longer beeps will be emitted from the Control Head and the remote will be paired.

**NOTICE:** A remote can be paired to one controller at a time. A controller can have multiple remotes paired to it.

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Scan to view the complete Micro Remote Owner's Manual online. The Owner's Manual is available at minnkota.johnsonoutdoors.com and includes information on compatibility, safety considerations, compliance, maintenance, parts and more.

## Pairing the Wireless Remote

1

- a. Press the Menu 🔤 button.
- Use the Speed Up or Speed Down
  button to find Bluetooth. Use the Steer Right
  button to select Bluetooth.

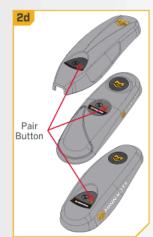




**NOTICE:** Make sure the remote stays within range of the Control Head during the pairing process.

2

- d. To pair the Wireless Remote to the trolling motor, enable Pairing Mode on the trolling motor. Press and hold the Pair button on the trolling motor's control head. The trolling motor will emit a continuous tone while in Pairing Mode.
- e. On the remote, use the Steer Right button to select Pair to Motor. The remote will scan for the motor. Continue to hold the Pair button on the trolling motor during this process.
- If successfully paired, the trolling motor will emit three beeps and the remote will be paired. The Pair button may be released.
- g. If 30 seconds pass while in Pairing Mode and the pair is not successful, an error tone will sound from the trolling motor, signaling that the pairing has timed out. If unsuccessful, repeat the process.
- When complete, press and hold the Menu button to return to the Dashboard.





1

Enable Bluetooth on the Device.

For Apple iOS - Open the "Settings" menu. Select "Bluetooth", then select "On". Keep the Bluetooth menu open and continue to the next procedure.

For Google Android - Open the "Settings" menu. Select "Bluetooth", then select "On". Keep the Bluetooth menu open and continue to the next procedure.

- To pair the Device to the Trolling Motor, enable Pairing Mode on the trolling motor. Press and hold the Pair button on the trolling motor Control Head. The trolling motor will emit a continuous tone while in Pairing Mode.
- Locate the trolling motor under the Bluetooth
   Device List "Minn Kota Controller 4.0". It may take a
   moment for the trolling motor to appear in the menu.

  Continue to hold the Pair button during this process.

**NOTICE:** Android devices must press Scan to locate the device in the Bluetooth list.

- d. Once "Minn Kota Controller 4.0" is listed, select it. The trolling motor will emit 3 beeps when the pairing is successfully completed and you may release the Pair button.
- If 30 seconds pass while in Pairing Mode and they do not successfully pair, an error tone will sound from the trolling motor Control Head, signaling that the pairing has timed out. If unsuccessful, repeat the process.

**NOTICE:** In order for the device and your trolling motor to stay connected, Bluetooth needs to remain "on". When the trolling motor is paired to the device and communicating with it, the One-Boat Network app will automatically recognize that the trolling motor is paired.







