

i-Pilot Link Wireless Accessory

Do NOT replace the complete i-Pilot Link as a boxed marine accessory. Diagnose and replace the defective component!

To evaluate most conditions the motor must be connected to the appropriate motor voltage (12/24/36 Volts) and powered on.

Notice: Ultrex, Ulterra, and Terrova 2018 and newer are powered on via power switch on the motor. These motors will not engage any motor functions in the stowed position, as determined by a tilt sensor in the i-Pilot Link Controller. 2017 and Older Terrova must be deployed to power on. Compatible PowerDrive V2 motors are operable as long as they are connected to power. For most cases the assumption is the motor is connected to power, powered on, and deployed as this is the required state for any operation in for most motors.

Notice: Make sure software on the i-Pilot Link (controller and remote) is up to date, some issues may be known bugs that are fixed in newer software. For information on updating software go to https://www.minnkotamotors.com/support/software#iPilotLink (QR code to the right). For BT systems the update to the system should be done using an iOS or Android Device with the i-Pilot Link App. For Legacy i-Pilot Link systems the update must be performed through a connected Humminbird Depth finder.



2.0/Legacy vs. 3.0/BT i-Pilot Link System

There are two different "generations" of i-Pilot link covered in this repair manual; most symptoms have the same or similar causes in spite of the differences in these systems and the fact that these systems are not cross compatible or interchangeable. Any case where these are specifically reference it is important to know which system is which. 2017 and early will be referenced as i-Pilot Link 2.0 or Legacy, the button on the controller will say "Learn", there will not be any Bluetooth logos on the controller or remote. 2018 and newer will be referenced as i-Pilot Link 3.0 or BT, the button on the controller says "Pair" and Bluetooth logos will be on the controller and the remote. For further reference the remotes are pictured below:



i-Pilot Link 2.0/Legacy

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i-Pilot Link 3.0/BT

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Part I. General Trouble Shooting

<u>Case I. The motor is making erratic steering corrections while in AutoPilot, Spot-Lock,</u> iTrack or Route Navigation, BackTrack, or Follow the Contour.

- **Step 1.** Check all electrical connections and battery condition to ensure that the proper voltage is supplied to the motor. Consistent voltage is critical to ensure the built-in compass is working correctly. (The i-Pilot Link system uses an internal compass to know which direction the controller and GPS receiver is pointing.) A load test of the battery should be performed to verify the battery(s) condition; a simple voltage check is not diagnostic.
- **Step 2.** Be sure to keep all ferrous metallic objects away from the i-Pilot Link controller as they will have an impact on the built-in compass. Such objects include: anchors, metal framework, etc...
- **Step 3.** Check to ensure proper motor leadwire routing in control box.
 - **A.** The red and black motor leads in the control box should be routed on the coil cord half of the control box. (Away from the compass of the i-Pilot Link controller.)
 - **B.** The red and black motor leads in the control box should be twisted around each other to cancel out the magnetic field created around these wires when the motor is running.
 - **B-1.** If the motor shaft was shortened, the brush lead wire should also be cut back the same length
 - **B-2.** If the motor shaft was shortened and the motor has a built-in transducer, the extra transducer cable should be routed out of the control box and down the coil cord.



Notice: The red/black wires should be twisted three times on both the coil cord and brush leadwire sides and then the insulator or shrink tube is slid in place over the spade connectors. This picture shows an Ulterra, but the wire routing is similar and critical for all motors with i-Pilot systems.

- **Step 4.** The i-Pilot Link GPS-based functions are dependent on having good GPS signals. Check to make sure that a good signal is being received and that the GPS signal strength indicator on the i-Pilot Link remote is showing at least one (1) bar. See **Case V**.
- **Step 5.** If the motor with i-Pilot being serviced is a 2017 or later model (Bluetooth version):
 - **A.** If motor has a separate Heading Sensor, it is very important that the Heading Sensor is properly installed and has gone through the calibration and offset procedures. While the Heading Sensor is there to help with navigation performance, if it is not properly installed/calibrated it can have a negative influence.
 - **A-1.** Temporarily remove power from the Heading Sensor and see how Spot-Lock performance is impacted. If performance is improved, suspect that the Heading Sensor was improperly installed. (The Heading Sensor contains a compass that detects a magnetic field so it should not be installed near ferrous metals or wires that handle large currents, such as batteries, power cables, or speakers.) The Heading Sensor will not lose it pairing to the i-Pilot system when it is powered down.
 - **B.** Boat Scale can be adjusted on the i-Pilot remote.
 - **B-1.** Ideal installation for a trolling motor is to have the proper amount of thrust for the size of the boat. If the motor thrust is not properly matched to the boat size, Boat Scale can be used to compensate for the mismatch. The default is zero, assuming that the boat and trolling motor thrust are properly matched. For an installation where the motor thrust is undersized for the boat, increase the Boat Scale. For installation where the motor thrust is oversized for the boat, decrease the Boat Scale.
- **Step 6.** If, after following the previous steps, the problem of erratic steering persists replace the i-Pilot Link Controller.



Case II. The boat doesn't seem to stay close enough to the recorded Spot-Lock location.

- Step 1. Verify the trolling motor batteries are sufficiently charged
- **Step 2.** Check for weeds wrapped around and under the prop.
- **Step 3.** In more extreme wind and current conditions, the boat will tend to stabilize a little downwind from the intended location. Relock the location the same distance upwind and expect that the boat will drift some in the downwind direction.
- Step 4. See <u>Case I.</u>

<u>Case III.</u> When in Advanced AutoPilot in strong winds, there is quite a bit of back and forth movement in the boat.

Step 1. While Advanced AutoPilot will keep your boat on a true heading, it may be at the expense of the boat having to continuously move to get back on the correct course. In these extreme conditions you may be better off using Legacy AutoPilot and correcting for the wind manually.

Step 2. See <u>Case I.</u>

<u>Case IV. Under AutoPilot mode, Advanced is selected as the default mode, however,</u> when engaged AutoPilot goes into Legacy AutoPilot instead of Advanced AutoPilot.

Step 1. If the GPS signal strength indicator shows no bars or is flashing, then Link will automatically engage Legacy AutoPilot regardless of the Mode selected. Wait for your GPS signal strength to reach at least one bar, then re-engage AutoPilot.

Case V. i-Pilot Link won't let me turn on certain features like: Advanced AutoPilot, iTrack Record & Playback, or Spot-Lock.

Step 1. Verify that the GPS signal strength icon on the remote's LCD shows at least one bar. If the GPS bars are



- **A.** Ensure that the motor has a clear view of the sky so it can obtain GPS reception. (Motor cannot be indoors or under a roof, bridge, or tree canopy.)
- **B.** Ensure the minimum voltage requirements at the motor are met.
- **C.** Replace the i-Pilot Link Controller.

Case VI. The i-Pilot Link GPS-based features drop out when the motor speed setting is increased.

- **Step 1.** Suspect a low voltage situation.
 - **A.** Inspect all battery connections, trolling motor plug (if installed) and any other connections between the batteries and the motor ensuring the connections are clean/free of corrosion, and mechanically tight. Use of inadequate guage wire in boat on any leadwire extension, or use of an inadequate or corroded plug and receptacle, can result in voltage drop to the motor.
 - **B.** Ensure the minmum voltage requirements of the motor are met.



<u>Case VII. The GPS speed displayed on the remote is different than what other GPS</u> systems on the boat indicate.

Step 1. If using Cruise Control with Advanced AutoPilot or iTrack Navigation, i-Pilot Link calculates the actual speed in the intended direction of travel which may differ from GPS reported speed.

Case VIII. Cruise Control is not holding the target speed close though

Step 1. Verify the trolling motor batteries are sufficiently charged.

Case IX. While Navigating an i-Track the propeller suddenly stopped.

- Step 1. Verify a different feature wasn't accidentally engaged, such as AutoPilot or Spot-Lock
- Step 2. The Arrival mode may be set to "OFF". When the End or Start point (depending on direction of travel) of any iTrack is reached the i-Pilot Link will automatically cancel i-Track navigation and engage the "Arrival Mode" (Off, Autopilot, Spot-Lock). See i-Pilot Link User Manual for more information.

Case X. When a key on the remote is pressed the motor does not respond.

- **Step 1.** Check the status of the battery charge icon on the remote. If low, connect the remote to the charger.
- **Step 2.** If the "Lock" icon is present on the screen, the keypad is locked.

For i-Pilot Link 3.0 (BT) systems: Press and hold the Screen Navigation **S** button to lock and unlock the remote.

For i-Pilot Link 2.0 systems: Press and hold either of the Soft Keys to unlock the keypad.

Step 3. Check for large obstructions between the remote and the motor.

Case XI. The Screen on the i-Pilto Link 3.0 (BT) remote displays "IPILOT LINK REMOTE BOOT"

Cause 1: The Spot-Lock button was held down as the remote was powered on. (This case will have a current software revision number)

Corrective Action 1: Reboot the remote.

Cause 2: Current software on the remote is unreadable. This will show the Current Software "INVALID", as in the picture to the right.

Corrective Action 2: Reload/Update Remote Software following these instructions.

Step 1. Update the i-Pilot Link Software. It is important to have the latest software in the motor to avoid any potential issues when the update is completed.

Notice: It is critical that you update the software on the motor, motors do not have a copy of remote software stored until an update has been performed. For more information on updating the software please go to https://www.minnkotamotors.com/support/software#iPilotLink (QR code to the right). The update to the controller should be done using an iOS or Android Device with the i-Pilot Link App.



DATABASE

https://www.minnkotamotors.com/ support/software#iPilotI ink

- **Step 2.** Connect the motor to power and power on the motor, this process can be completed with the motor in the stowed position.
- **Step 3.** Press and hold the "Pair" button on the i-Pilot Link Control Head of the motor (the motor will emit a continuous tone while you hold the pair button). Do not release the button through the end of Step 4.





Step 4. From the remote control scroll down from "POWER OFF" to "Pair" using the "-" button on the keypad. Press and release the " ✓ " on the remote. The remote will say "PAIRING" while scanning for the motor, when the motor successfully pairs to the remote the motor will emit three beeps and the tone will stop, and the top of the text screen will now say "CONNECTED". You can release the Pair button on the control head at this point.

With the Pairing process now complete the screen will say "CONNECTED" at the top and have a few different menu options.



Step 5. Use the "+" and "-" buttons to align the arrow with the "UPDATE SOFTWARE" option from the menu list, then press release the " ✓ " to begin the software

update process. The remote will Display "UPDATING" and will begin a count down, when the count reaches "0" it will say "WRITING FLASH", then automatically return to the menu screen (same as left picture below).



- **Step 6.** Power the remote off; use the "+" and "-" buttons to move the arrow so it points to "POWER OFF" from the menu list, then press and release the " < " to turn the remote off.
- Step 7. Press and hold the " ✓ " to turn the remote back on. If the software update was successful the normal Graphic User Interface Boot screen will appear on the remote as shown to the right. If the software update is unsuccessful replace the remote, part number 2994076.

Notice: The remote will not be paired to the motor at the completion of this process. Pair the remote to the motor following the normal pairing instructions.



Case XII. There is a message on the remote screen showing "Motor not Found". Also, the keys on the remote are not controlling the motor.

Cause: This Message is due the remote not having wireless communications with the i-Pilot Link controller. This could be due to:

- The motor not being powered up. (Connected to appropriate voltage and powered on. Terrova prior to 2017 must also be deployed, green system ready light on.)
- The remote not being learned/paired to the controller. (See learning or pairing in Part II)
- The network plug connections, at the motor control board or in the control box, unplugged or damaged.
- Broken/intermittent wire in the coil cord or network plug connections.

Case XIII. The screen on the i-Pilot Link 3.0 (BT) remote displays "RF error".

Cause: This indicates a fatal error with the remote. The remote needs to be replaced with p/n 2994076



Case XIV. There is a message on the remote screen showing "Motor Error".

Cause: This indicates that the i-Pilot Controller is not able to communicate with the motor control board. This error will not display on PowerDrive motors.

Step 1. Cycle Power to the motor.

- A. On Terrova/Riptide ST from 2016 and earlier (non-Blue Tooth) the main control board only looks for accessories when it first powers up; if the i-Pilot began communicating after initial power up or was installed while powered up, the control board will not recognize it until the next time it powers up. This step may resolve the issue.
- **B.** Re-test for proper remote function. If the "Motor Error" is not displayed the i-Pilot is functioning properly. If the "Motor Error" is still present proceed to **Step 2**.
- **Step 2.** Disconnect the i-Pilot system and test the motor for full function using a known good foot pedal.
 - **A.** If the motor fails to function properly using a foot pedal, resolve all motor issues then retest remote function prior to proceeding to **Step 3**.
 - **B.** If the "Motor Error" message is still present and the motor functions correctly via foot pedal proceed to **Step 3**.

Step 3. Disconnect Power to the motor.

- A. Check the i-Pilot coil cord network plug connection in the control box/head for corrosion and verify that is fully connected (connected properly there should be no yellow visible between the male and female plug ends).
- **B.** Check the network plug(s) at the Control Board; on Terrova/Riptide ST motors that have CoPilot installed on the alternate network plug disconnect that CoPilot (i-Pilot disables CoPilot function, but if there is a fault in a connected CoPilot it may disable network communication). Verify that the connection to the coil cord is fully seated.
- **c.** Reconnect power and retest.
- D. If "Motor Error" is no longer showing a loose connection or faulty CoPilot was the cause for the error. If the "Motor Error" message is still displayed Proceed to Step 4. If a network plug that was previously connected is going to be left disconnected install a 2320203 Cap Plug on that plug prior to returning the motor to the customer.
- **Step 4.** Disconnect power to the motor.
 - A. Disconnect the network cable at both ends of the coil cord and test continuity through each of the 5 pins. If no continuity is present end to end, or any pin has continuity to one of the other pins replace the coil cord.
 - **B.** If there is an unused network accessory plug on the control board connect the coil cord to that plug and retest the system. i-Pilot installed motors will never have a use for a second network plug, if this connection does not display "Motor Error" this works as a complete repair.
 - **c.** If the "Motor Error" Message is still displayed replace the i-Pilot Controller (head).

Case XV. Customer complaint that the battery in the i-Pilot Link remote drains quickly.

Notice: The i-Pilot Link remote contains a rechargeable battery. A fully charged battery lasts approximately 8 hours under normal conditions. The user has the option of plugging the USB end of the charging cable into any USB type power source. The remote can be recharged while the remote is on or off.

Adjusting the Backlight Brightness and Timeout length may significantly increase battery life. Constantly sending signals with the remote does

Case XVI. The charging cable is connected but the charging indicator does not come on.

- **Step 1.** Ensure the remote charger cable (USB) end is receiving power from the AC adapter or the alternate power source being used.
- **Step 2.** Look inside the charging port on the bottom end of the remote. You should clearly see two metallic contacts. Use an appropriate tool to clean out any debris that may have accumulated in the charging port.
- **Step 3.** The end of the remote charger cable (USB) that plugs into the remote includes two spring pins. Ensure the pins are clean and spring back out when pushed in.



Case XVII. The customer is having a difficult time seeing the content on the LCD screen.

Step 1. Depending on the ambient lighting in the area, the backlight may be needed.

- A. For i-Pilot Link 3.0 (BT) systems: Adjust the desired brightness through the Options Menu button
- **B.** *For i-Pilot Link 2.0 systems:* Through the Backlight Settings Menu, you can adjust the intensity of the backlight along with the time it stays on after a button press.

Case XVIII. The heading sensor calibration failed. (i-Pilot Link 3.0 (BT) only)

Step 1. The heading sensor needs to be located in a place where it is not subject to magnetic interference, as it is an electronic compass. Ensure that the heading sensor is mounted at least 24 inches from magnetic or ferrous materials or anything that may create a magnetic interference. Some of which may include: base of the trolling motor, anchors, metal railings, speakers, radios, and trolling motor battery leadwires. It must be mounted on a flat, horizontal surface with the arrow on the sensor parallel to the boat's keel. It should have a line of sight to the i-Pilot Link Controller for best operation.



Part II. Miscellaneous System Information

Accuracy

The accuracy and responsiveness with which i-Pilot controls your boat is highly dependent upon many variables. A few of these variables and their general effects on responsiveness and accuracy are given below:

Variable	Effect	
Ratio of motor thrust to boat weight	Excessive thrust on a smaller boat can cause i-Pilot to over correct. 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.	

Remote Pairing/Learning

For i-Pilot Link 3.0 (BT) systems:

An i-Pilot Link controller may pair up to 3 remotes. These 3 remotes can be a combination of standard i-Pilot Link 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.

- **Step 1.** With the motor powered up (green system ready light on), turn the remote on by pressing the Ok button **1**. Allow the disclaimer page to load, then touch the "I Agree" area on the touch screen display.
- **Step 2.** Press the Home 🙆 button.
- **Step 3.** Scroll through the Content Area using either your finger or the Screen Navigation button to highlight the System Dutton.
- Step 4. Select the System 🖭 button using either your finger or by pressing the Ok 🔊 button to open the System Menu.

Notice: Make sure the remote stays within range of the Control head during the pairing process.

- **Step 5.** Once in the System Menu, use your finger to scroll through to find the Pairing option or highlight the Pairing button using the Screen Navigation button. Before selecting the Pair Option, locate the Pair Button on the top of the Control Head. Press and hold the Pair button. A consistent tone will be emitted from the Control Head.
- **Step 6.** On the remote, select the Pairing option. The Remote will scan for the motor. Once successfully paired, 3 longer beeps will be emitted from the Control Head and the remote will be paired.

For i-Pilot Link 2.0 (Legacy) systems:

A controller can have up to 4 remotes learned to it and actively communicating with it. The top of the Controller has a single learn button to allow additional remotes to be added to the system. To learn additional remotes:

- **Step 1.** With the motor powered up (green system ready light on), turn the remote on by pressing the OK button. Allow the disclaimer page to load, then touch the OK button again to display the home page.
- **Step 2.** Push and hold the learn button down. A steady audio tone will be heard while holding this button.
- **Step 3.** While holding the learn button on the controller, from the remote home screen select: Controls > Learn and press the OK key.
- **Step 4.** If the learn process was successful, the controller will respond with four beeps. In addition, the Dashboard section of the remote will begin to display motor status information such as prop speed.



Audio Modes

For i-Pilot Link 3.0 (BT) systems:

The i-Pilot Link controller in the Control Head contains an internal speaker which can be configured to work in two different audio modes. The unit is factory set to Audio Mode 2. To select the different audio modes press the Home for button, then from the Home screen go to: Settings>Options>Audio Mode

Review the modes below to determine what audio patterns are caused by conditions in each audio mode.

Audio Pattern	What Condition Causes Audio Pattern	Audio Mode
	Attempting to enable a GPS feature when no signal strength bars are shown.	Mode 2
	Attempting to Go To iTrack, Spot-Lock or Waypoint when the boat is beyond the minimum required distance.	
Error	The Momentary Button on the foot pedal is pressed, for applicable motors, and a remote button press attempts to override it.	Mode 2
	When GPS signal strength goes to no bars while in a GPS-based mode.	Mode 2
	When overriding navigation by steering with the foot pedal or remote.	Modes 1 and 2
	Speed + (When less than maximum speed.)	Mode 2
	Speed - (When greater than speed 0.)	Mode 2
CI L D	Enable High Speed Bypass.	Mode 2
Single Beep	Switch to Audio Mode 1	Modes 1 and 2
	Manual Prop on	Mode 2
	Enabling or disabling Record, GO TO, AutoPilot, Cruise Control or Spot-Lock.	Mode 2
	Disable High Speed Bypass.	Mode 2
Double Beep	Switch to Audio Mode 2	Modes 1 and 2
	Manual Prop off	Mode 2
3 longer Beeps	Pair successfully completed	Modes 1 and 2
4 Short Beeps	Startup	Modes 1 and 2
Steady Tone	Pair button is pressed.	Modes 1 and 2
High-Low, High-Low, High-Low	End of iTrack attained during track playback (in conjunction with canceling mode and turning the prop off)	Mode 2

For i-Pilot Link 2.0 (Legacy) systems:

The i-Pilot Link Controller contains an internal speaker which can be programmed to work in two different audio modes. The speaker is programmed to operate in audio mode 1 from the factory. To select the different audio mode, from the Home screen go to: Settings>Configurations>Audio Mode.

For an explanation of each audio mode and their sounds see the table below.

WHAT CONDITION CAUSES IT	AUDIO MODE	AUDIO PATTERN
Start up	Modes 1 and 2	4 short beeps
Manual prop on	Mode 2	Single beep
Manual prop off	Mode 2	Double beep
Speed +	Mode 2	Single beep
Speed -	Mode 2	Single beep
Enabling any of these functions: GoTo iTrack, GoTo Waypoint, Spot-Lock, AutoPilot, Cruise Control	Mode 2	Single beep
When GPS signal strength goes to no bars while in a GPS-based mode	Modes 1 and 2	Error
Attempting to enable a GPS-based mode when no signal strength bars are shown	Modes 1 and 2	Error
MOM button on the footpedal is pressed and a remote button press attempts to override it	Mode 2	Error
End of an iTrack is reached and the Arrival Mode option is set to OFF	Mode 2	4 longer beeps
Learn button is pressed	Modes 1 and 2	Steady tone
Learn successfully completed	Modes 1 and 2	4 longer beeps



Software Updates

Notice: Information on performing software updates is also available on the Minn Kota Website. For details go to <u>https://www.minnkotamotors.com/support/software#iPilotLink</u> (QR code to the right). i-Pilot Link 3.0 (BT) systems are best updated using the i-Pilot Link app from the Google Play Store (on Android) or the Apple App Store (on iOS). i-Pilot Link 2.0 is can only be updated through a compatible Humminbird.

For i-Pilot Link 3.0 (BT) systems:

Minn Kota offers an i-Pilot Link App that can be used to control and update i-Pilot Link on your motor using a Bluetooth[®] enabled device. The i-Pilot Link App is available for download on iOS devices through the Apple App store or Android devices through the Google Play store.

Notice: The app cannot communicate directly with the i-Pilot remote. The i-Pilot controller holds i-Pilot remote updates. Complete any remote updates after all other updates have been complete.

- Step 1. Update the i-Pilot Link App
 - A. Open the i-Pilot Link app on the device. Check to see if the App Update Indicator icon in the upper right hand corner is present. If no icon is present, the device app is up-to-date.
- Step 2. Check Remote and Controller Software Version

The i-Pilot Link App on the device communicates with the i-Pilot Link controller, which is in the Control Head of the paired motor. When the App is communicating with a controller, the About screen will display the current version of the app and information about the versions of software in the controller.

- A. From the i-Pilot app Home screen, press the Menu icon.
- B. In the Menu screen, select the About option.
- **c.** The About screen will appear showing the version of the i-Pilot app on the device, the version of i-Pilot software in the controller and the version of the i-Pilot remote software stored in the controller.

Notice: Noting the version of the App, controller, and remote will help to identify if they are up-to-date and if updates were successful.

Step 3. Update the i-Pilot Link Controller

To update the controller, confirm that the device is turned ON and the controller is paired with the device. **A.** Make sure that the following criteria are met:

- The app is up-to-date.
- The device has Bluetooth enabled.
- The device is paired with the controller.
- The device is within range of the controller during the update process.
- **B.** Open the i-Pilot App on the device.
- **c.** Read and then accept the disclaimer to bring up the Home screen. In the upper left hand corner of the Home screen, press the Menu icon to bring up the Menu.
- **D.** When the Menu screen displays, select the i-Pilot Software Update option.
- **E.** If the software is up-to-date, the screen will read "Software Up To Date". If the software needs to be updated, there will be information on the screen stating "New Software Available!"
- **F.** Select "New Software Available!" and information about the current and new versions will display along with a button that reads, "Press to begin Update."
- **G.** Follow the on-screen prompt to successfully complete the update.
- **Step 4.** Update the i-Pilot Link Remote Software
 - **A.** Be sure that the software in the Controller is updated before updating the remote.

Notice: The software update for the remote will come from the Control Head. Make sure the remote stays within range of the Control Head during the update process.

B. Once the Controller is up-to-date, press the Home **a** button.





- **c.** Scroll through the Content Area using either your finger or the Screen Navigation **b** button to find the System **b** button.
- D. Select the System 🙁 button using either your finger or by pressing the Ok 🕽 button to open the System Menu.
- **E.** Once in the System Menu, scroll through to find the Update Software option and select it. If the software is up-to-date, the display screen will read "No New Software Found."
- F. If the software is not up-to-date, the display screen will read "New Software Available" and will list the

Notice: After selecting the Update Software option on the display screen, take note of the software version that the remote will be updated to. Noting the software version will be helpful to confirm that the software successfully updated after the remote cycles through the update.

current version installed and the new version that can be installed.

G. Select the Update Subtron. Once the software has been downloaded, the display screen will reboot and the remote will power up and return to the home screen. To confirm that the software successfully updated, follow the steps in the "To Open the About Screen" section of this manual

For i-Pilot Link 2.0 (Legacy) systems:

A customer will need to set up an online account at humminbird.com so that they can receive the latest Humminbird news and software updates. They will need a Humminbird Fishfinder as the i-Pilot Link remote and controller software are also updated through the Humminbird Fishfinder.

Required Equipment: Personal computer with internet access, a formatted SD memory card, a USB memory card reader, and an i-Pilot compatible Humminbird Fishfinder.

- **Step 1.** Download the Software
 - A. Install a formatted SD memory card into the card reader connected to your PC.
 - **B.** Go to <u>https://www.humminbird.com/support/software-updates</u>
 - C. Scroll down to "Accessories & Mapping"; click on "i-Pilot Link" to expand the menu.
 C-1. Click on either "I-PILTO LINK REMOTE UPDATE" or "I-PILOT LINK
 - CONTROLLER" for the fish finder system you are using for the update.
 - c-2. Follow the instructions on the screen to save the software to the SD Card
 - **C-3.** Repeat steps C-1 and C-2 for the other selection.
- **Step 2.** Prepare the Equipment
 - **A.** Turn on the main power source.
 - **B.** Power on the trolling motor. If you have a Terrova or Riptide ST trolling motor, deploy it.
 - **c.** Turn on the remote by pressing the OK key. Ensure the battery is well charged. If the battery charge is not sufficient you will be prompted during the process to plug in the charger.
 - **D.** Turn on the Fishfinder by pressing the **O** POWER/LIGHT key, and follow the on-screen prompts to start Normal mode.
 - **E.** Press and hold the Fishfinder VIEW key. Select System>Accessory Test.
 - **F.** Confirm that i-Pilot Link is listed as connected. It may take a minute for the equipment to be detected. You will refer to this view throughout the update. Note the current software version number shown next to i-Pilot Link.

Notice: If the Accessory Test View is not shown in the submenu, select the Main Menu>Views tab>Accessory Test>Visible.

- **Step 3.** Update the Software
 - **A.** Install the SD card with the updated software files into the Fishfinder card slot.
 - **B.** The software will be updated automatically. It may take up to two minutes for the software to be detected on the network, and the Fishfinder will display on-screen dialog boxes to indicate that the update is in progress.

Notice: You may notice that the i-Pilot Link will disconnect and then reconnect during the software update. This is part of the update process.





- **c.** When the i-Pilot Link software has been updated, the new software version number bill be displayed on the Fishfinder Accessory Test View.
- **D.** To finish updating the remote and controller, proceed to the next section.

Step 4. Update the Remote

The new software for the remote is now loaded on the Link Controller. You must now go to the remote and initiate the download of the remote software to the remote itself.

- **A.** From the remote Home screen, select: Settings Softkey>Update Software>OK.
- **B.** From this screen, select the Update option.
- **c.** A message saying "Software Updating" will appear along with a progress bar. After that, another message saying "Programming Flash" will appear along with a progress bar.
- **D.** After the second progress bar finishes, the remote will automatically restart.
- **Step 5.** Cycle Power to the system (Turn off and back on).



i-PILOT[®] LINK™

OUICK REFERENCE GUIDE

Part III. Remote Quick Reference Guides (QRG)

i-Pilot Link remote 3.0 (BT)

过 MINN KOTA

Compatible with all Bluetooth® enabled i-Pilot® Link[™] Systems





i-Pilot Link remote 3.0 (BT)

CRUISE CONTROL)

- **Engaging Cruise Control**
- 1. Scroll through the Content Area using your Scroll through the Content Area using your finger or the Screen Navigation 8 button to find the Cruise Control button.
 Select the Cruise Control button using your finger or by pressing the Ok button.
- 3. The Cruise Control target speed will appear in the Dashboard. The Target Speed can be increased and decreased using the Speed Up
- and Speed Down **buttons**.
- Disengaging Cruise Control
- 1. When Cruise Control is engaged, scroll through the Content Area using your finger or the Screen Navigation **g** button to find the Cruise Control **button**.
- 2. Select the Cruise Control 🚨 button using your finger or by pressing the Ok 🔊 button. 3. The Cruise Control Target Speed will disappear from the Dashboard.

AUTOPILOT)

Engaging AutoPilot

Legacy

Autopliot

- 1. Scroll through the Content Area using your finger or the Screen Navigation 🗿 button to find the AutoPilot 🔝 button.
- 2. Select the AutoPilot 🔝 button using your finger or by pressing the Ok 🌘 button.
- 3. The AutoPilot Active Band will appear in the Content Area. Either Legacy AutoPilot or Advanced AutoPilot will be engaged depending on the AutoPilot Mode selected.





- Disengaging AutoPilot 1. When AutoPilot is engaged, scroll through the Content Area using your finger or the Screen Navigation 🔓 button to find the AutoPilot 📜 button.
- 2. Select the AutoPilot 🚨 button using your finger or by pressing the Ok 🔋 button
- 3. The AutoPilot Active Band will disappear from the Content Area

SPOT-LOCK

- 3 Engaging Spot-Lock
 - 1. Press the Spot-Lock 🚯 button.
 - 2. The Spot-Lock Active Band will appear in the Content Area. SL0163



- Distance Oft 4. Scroll through the Spot-Lock Control Screen using your finger or by pressing the Screen Navigation 🖁 button to find the Save 💽 button.
- 5. Select the Save 💽 button using your finger or by pressing the Ok 🚺 button to save the Spot-Lock. The Save icon will disappear from the Active Band.
- Spot-Lock Jog
- (Heading Sensor required.)
- 1. To engage Spot-Lock Jog, first engage
- Spot-Lock. Use the Speed Down 🍅 (jog

Part #2397107

backward), Speed Up 🖚 (jog forward), Steer Left 🕏 (jog left), and Steer Right 🧔 (jog right) buttons to jog the Spot-Lock location 5 feet in the selected direction from the current Spot-Lock location

- 2. To Jog the Spot-Lock location with the Screen Navigation a button, select the Spot-Lock Active Band to open the Spot-Lock Control Screen. Select the Back , Forward , Left), or Right buttons using your finger or by scrolling to one with the Screen Navigation by button and pressing the Ok button.
- > Disengaging Spot-Lock
- 1. With Spot-Lock engaged, press the Spot-Lock 🚯 button on the remote to disengage Spot-Lock.
- 2. The Spot-Lock Active Band will disappear from the Content Area.
-) Go To a Saved Spot-Lock
- 1. Scroll through the Content Area using your finger or the Screen Navigation 8 button to find the Go To Spot-Lock 🔬 button.
- 2. Select the Go To Spot-Lock 🔬 button using your finger or by pressing the Ok 👔 button. A list of Spot-Locks that are within a quarter mile will appear.
- 3. Scroll through the list of Spot-Locks using your finger or the Screen Navigation 🖉 button to find a Spot-Lock.
- 4. Select the Spot-Lock using your finger or pressing the Ok 🐧 button.
- 5. The Spot-Lock Active Band will appear in the Content Area. The appearance of the Active Band will vary depending on the distance between

the current location and the selected Spot-Lock

WAYPOINTS

- > Mark a Waypoint
- 1. Scroll through the Content Area using your finger or the Screen Navigation 🔗 button to find the Mark Waypoint 🧝 button.
- your finger or by pressing the Ok 💊 button.
- 1. Scroll through the Content Area using your finger or the Screen Navigation 8 button to find the Go To Waypoint 🙎 button.
- 2. Select the Go To Waypoint 🔝 button using your finger or by pressing the Ok 🛯 button. A list of Waypoints that are within a quarter mile will appear
- 3. Scroll through the list of Waypoints using your finger or the Screen Navigation 🗿 button to find a Waypoint to navigate to.
- 4. Select the Waypoint using your finger or by pressing the Ok 🐧 button.
- 5. The Waypoint Active WP1210 Band will appear in the Content Area.
- > Disengage Go To Waypoint
 - 1. When Go To Waypoint is engaged, scroll through the Content Area using either your finger or the Screen Navigation button to find the Waypoint Active Band.

- 2. Select the Waypoint Active Band using your
- Select the Waypoint Active Band Using Your finger or by pressing the Ok button.
 Select the Cancel button from the Waypoint Control Screen using your finger or by scrolling to it with the Screen Navigation button and pressing the Ok button to select it.

ITRACK

Recording an iTrack

- 1. Scroll through the Content Area using your finger or the Screen Navigation g button to find the Record ... button.
- 2. Select the Record ... button using your finger or by pressing the Ok button. The iTrack Active Band will appear in the Content Area.
- 3. Engage the Prop and manually navigate the desired course.
- 4. To Save the recording, select the iTrack Active Band using your finger or by scrolling to it with the Screen Navigation and pressing the Ok 💧 button. IT0000200163
- 5. Select the Stop and Save _____ button from the iTrack 163 ft Control Screen using your finger or by scrolling
- to it with the Screen Navigation 🛿 button and pressing the Ok 🎙 button.
- > Go To a Saved iTrack
 - 1. Scroll through the Content Area using your finger or the Screen Navigation abutton to find the Go To iTrack Subutton.
 - 2. Select the Go To iTrack 😭 button using your finger or by pressing the Ok 👔 button. A list of iTracks that are within a quarter mile will appear.
 - 3. Scroll through the list of iTracks using your finger or the Screen Navigation 🗿 button to find an iTrack.
 - Select the iTrack using your finger or by pressing the Ok

 button.
- Decide to navigate To Start or To End and select the appropriate button using your finger or by scrolling to it with the Screen Navigation
 button and pressing the OK IT0000000006
- 6. The iTrack Active Band will appear in 🛛 🚳 👞 the Content Area. 0 ft
- 🔰 Disengage Go To iTrack
 - 1. When Go To iTrack is engaged, scroll through the Content Area using your finger or the Screen Navigation 🖉 button to find the iTrack Active Band
 - Select the iTrack Active Band using your finger or by pressing the Ok § button.
 - 3. Select the Cancel 🔣 button from the iTrack Control Screen using your finger or by scrolling to it with the Screen Navigation **a** button and pressing the Ok **b** button to select it.
- - NOTICE: For i-Pilot Link features that can be activated from the Humminbird please refer to your Humminbird manual.

Rev A



Scan to view the complete i-Pilot Link Owner's Manual online.



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- Distan 100 ft
- 2. Select the Mark Waypoint 🙎 button using



- ECN 39363

- 100 ft SL000000163













OPERATING MODES

CRUISE CONTROL

ENGAGING CRUISE CONTROL

- 1. Press the Cruise Controlkey on the remote.
- Press the Speed Up or Speed Down keys to adjust the target speed shown in the Target Gauge.
- Press OK to accept the target speed and engage Cruise Control.

DISENGAGING CRUISE CONTROL

- 1 Press the Cruise Control key on the remote.
- 2. Press the softkey marked Cancel.

AUTOPILOT

ENGAGING AUTOPILOT

From the remote:

1. Press the AutoPilot key on the remote.

From the Humminbird:

- 1 Navigation X-Press Menu: Press the MENU key.
- 2. Select AutoPilot and press the RIGHT Cursor key.

ADJUSTING AUTOPILOT

From the remote:

Use the steering keys.

From the Humminbird:

- 1 Navigation X-Press Menu: Press the MENU key.
- Select AutoPilot Adjust and press the RIGHT Cursor key.
- 3. Adjust: Press the RIGHT or LEFT Cursor keys.
- 4. Confirm: Pressthe CHECK/INFO key.

WAYPOINTS

MARK A WAYPOINT USING THE REMOTE

 To save a Waypoint at the boat's position, press and hold the Spot-Lock key.

MARK A WAYPOINT USING THE HUMMINBIRD

- To save a Waypoint at the boat's position, press the MARK key.
- 2 To save a Waypoint at the cursorposition, use the 4-WAYCursor Control key to move the active cursor to a position on the Chart View. Then, press the MARK key.

NAVIGATE TO A SAVED WAYPOINT USING THE REMOTE

- 1. Press the GOTO key followed by the Waypoints softkey.
- Select a Waypoint from the list and press the OK key.

NAVIGATE TO A SAVED WAYPOINT USING THE HUMMINBIRD

- 1 From the Chart View, press the GOTO key.
- Select a Waypoint from the list, and press the RIGHT Cursor key.

OR

 Use the 4-WAY Cursor Control key to select a Waypoint or position on the chart. 2. Press the GOTO key.

DISENGAGE NAVIGATING TO A WAYPOINT FROM

- Switch to the GOTO Active Screen by pressing the GOTO key.
- 2. Press the Cancel Softkey.
- OR
 - 1 Press the Steer Left or Steer Right key.

DISENGAGE NAVIGATING TO A WAYPOINT FROM THE HUMMINBIRD

- 1 Navigation X-Press Menu: Press the MENU key.
- Select Cancel i-Pilot Navigation, and press the RIGHT Cursor key.

SPOT-LOCK

MARK/ENGAGE SPOT-LOCK USING THE REMOTE

Mark a Spot-Lock and engage using the remote

- 1 Press the Spot-Lock key.
- 2. Save (optional): Press the Save Softkey.

MARK/ENGAGE SPOT-LOCK USING THE HUMMINBIRD

Mark a Spot-Lock at the cursor position

- Use the 4-WAY Cursor Control key to move the cursor to a position on the chart.
- 2. Navigation X-Press Menu: Press the MENU key.
- Select Mark Spot-Lock, and press the RIGHT Cursorkey.
- Press the EXIT key until the Navigation X-Press Menu is closed.

Engage Spot-Lock at the boat position

- 1 Navigation X-Press Menu: Press the MENU key.
- Select Spot-Lock at Vessel, and press the RIGHT Cursorkey. Spot-Lock will start immediately.
- Save (optional): Press the MENU key. Select Save Spot-Lock, and press the RIGHT Cursor key.

Mark a Spot-Lock and start navigation

- Use the 4-WAY Cursor Control key to move the cursor to a position on the chart.
- 2. Navigation X-Press Menu: Press the MENU key.
- 3. Select Spot-Lock at Cursor, and press the RIGHT
- Cursorkey. Navigation will start automatically.

ENGAGE SPOT-LOCK AT A WAYPOINT POSITION

- Use the 4-WAY Cursor Control key to move the cursor to a Waypoint on the chart.
- 2. Navigation X-Press Manu: Press the MENU key.
- 3. Select the Waypoint name > Spot-Lock.

NAVIGATE TO A SAVED SPOT-LOCK USING THE REMOTE

- 1 Press the GOTO key.
- 2. Select a Spot-Lock from the list and press the OK key.

NAVIGATE TO A SAVED SPOT-LOCK FROM THE HUMMINBIRD

 Use the 4-WAY Cursor Control key to select a Spot-Lock icon on the chart.



Press the GOTO key.

OR

- 1 Press the GOTO key.
- 2. Select a Spot-Lock from the saved points list.
- 3. Press the RIGHT Cursor key.

DISENGAGE SPOT-LOCK FROM THE REMOTE

- Switch to the Spot-Lock Active Screen by pressing the Spot-Lock key
- 2. Press the Cancel Softkey.

OR

 Press any manual control key (steering, prop speed, prop on/off).

DISENGAGE SPOT-LOCK FROM THE HUMMINBIRD

- Navigation X-PressMenu: Press the MENU key.
 Select Cancel i-Pilot Navigation, and press the
- RIGHT Cursor key.

ITRACKS

START RECORDING ANITRACK

From the remote:

1 Home Screen > Controls > Record > OK.

From the Humminbird:

- 1 Main Menu: Press the MENU key twice.
- 2. Select the Accessories tab.
- Select Record iTrack, and press the RIGHT Cursor key.
- 4. Press the EXIT key until the menu system is closed.

STOP RECORDING AN IT RACK

From the remote:

- Record Active Screen > StopRec softkey > Save or Discard
- From the Humminbird:
 - 1 Navigation X-PressMenu: Press the MENU key.
 - Select Stop Recording **Track**, and press the RIGHT Cursor key Save Yes or No.

NAVIGATE AN ITRACK FROM THE REMOTE

- Press the GOTO key followed by the Tracks softkey.
- Select an iTrack from the list and press either the To Start or To Endsoftkey.

NAVIGATE AN ITRACK FROM THE HUMMINBIRD

- Use the 4-WAY Cursor Control key to select a Start Track icon, End Track icon, or a position on the iTrack.
- 2. Press the GOTOkey.
- 3. Use the 4-WAY Cursor Control key to select one of the submenu actions: Navigate to Start;Navigate to End. OR
- 1 Press the GOTO key.
- Select an iTrack Start or iTrack End from the GOTO list.

BACKTRACK

 Humminbird Navigation X-Press Menu: Press the Menu key.

- 2. Select BackTrack.
- Note that BackTrack will create and save an iTrack using up to the last 2 miles of the Current Track. It will also automatically engage navigation towards the End point of the iTrack.

ROUTES

CREATE AROUTE ON THE HUMMINBIRD

- In a Chart View, use the 4-WAY Cursor Control key to select a Way point, Spot-Lock or position on the chart view.
- 2. Press the GOTO key.
- To add more points to the route, repeat steps 1 and 2.
- Save (optional): Press the MENU key. Select Save Current Route and press the RKHT Cursor key.

NAVIGATE A ROUT EFROM THE HUMMINBIRD

- 1 Main Menu: Press the MENU key twice.
- 2. Select the Nav tab.
- Select Waypoints, Routes, Tracks and press the RIGHT Cursor key.
- Use the 4-WAY Cursor Control key to select the route to be navigated and press the RIGHT Cursor key.
- From the menu, use the 4-WAY Cursor Control key to select Travel, then select Forward or Reverse.

FOLLOW THE CONTOUR

ENGAGE FROM THE HUMMINBIRD

- Use the 4-WAY Cursor Control key to move the cursor to a LakeMaster contour line.
- 2. Press the GOTO key.
- Using the 4-WAY Cursor Control key, perform the following selections:
 - · Select Contour Offset to set the offset if desired.
 - Select anavigation direction.

SET THE CONTOUR OFFSET

- DURING NAVIGATION 1 Navigation X-Press Menu: Press the MENU key.
 - Navigation A-Press Menu: Press 0
 - 2. Select Contour Offset.
 - Press the RIGHT or LEFT Cursor keys to set the Offset.

HIGH SPEED BYPASS

ENGAGE HIGH SPEED BYPASS

 Press the High Speed Bypass softkey on the home screen to set the motor speed to maximum. The rabbit icon will change to the revert icon.

DISENGAGE HIGHSPEED BYPASS

 Press the Revert softkey to disengage High Speed Bypass and send you back to your previous speed.

OR

 Press the Speed Down key to disengage the High Speed Bypass and lower your speed from the maximum speed.

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