



# iTroll

Precision Throttle Controller

[www.iTroll.us](http://www.iTroll.us)

Made in USA

## Generation 2 Owner's Manual Software Version: OS6.0



"T. H." - Lake Erie



"Al H." - Columbia River, OR

The iTroll story started when an avid fisherman was not satisfied with the unreliable and simplistic products that were available at the time. As the owner of a company that designed and manufactured electronics, he decided to create a throttle controller that met his personal standards for RELIABILITY, INNOVATION AND SAFETY.

After an extensive two year development process, the iTroll was introduced in 2013 and quickly took the angling world by storm. Even to this day, no other throttle controller comes close to the precision, durability and innovation of iTroll. Be sure to explore HUNT Mode as it is the most innovative feature ever put in a throttle controller.

We constantly receive calls and emails from iTroll users describing the role it played in achieving their best tournament results and personal best catches. We are honored that many of them have taken the time to send us pictures and have allowed us to put them in this document. We wish we had space to share them all!

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Thank you for purchasing iTroll, the most innovative throttle controller to be unleashed on unsuspecting fish! A partial list of iTroll's industry first features include a fully weatherproof enclosure, 32 character lighted display, 1000 throttle positions, last idle recall, secondary cruising speed (SCS), DRAG Mode and the ability to control two motors.

Your iTroll can be taken "over the top" by purchasing software upgrades to enable Dual Motor Control and the revolutionary HUNT Mode that is often called "**The Deadliest Tool in Fishing**"!

### Safety Precautions when using iTroll

- Always attend iTroll and the boat's steering so that speed & heading is managed at all times.
- Manage iTroll's cable so it does not present a tripping hazard.
- Make sure occupants of vessel are seated at all times.
- iTroll is only to be used to control boat at LOW speeds typically used when trolling.
- iTroll is to be used by Adults only!
- Do NOT use iTroll when under the influence of alcohol, prescription drugs or controlled substances.
- Boating safety ultimately falls into the hands of the boat's operator. Take a boating safety course, use common sense at all times, and obey all published safety procedures & suggestions. Always use an ignition switch safety lanyard!



#### iTroll's Sealed Dial Shaft

iTroll has a weather proof enclosure and dial. The dial's shaft seal gives the dial some "spring back" where if turned to the right and released, it will return slightly left and vice versa. This is normal. The spring back will diminish as the seal breaks in, but will always be present to some degree. All sealed shafts behave in this manner.

iTroll's Buttons & Components:

- 1 - On / Off: Turns iTroll on and off. Also used for other functions.
- 2 - Hunt: Used with HUNT Mode. Also used for other functions.
- 3 - Idle / Run: Used to swap between idle, drag and trolling speeds.
- 4 & 5 - Left & Right: Used to control other manufacturer's kicker motor steering units (steering units NOT included with iTroll).
- 6 - Max: Engages maximum throttle. Also used for other functions.
- 7 - Speed / Throttle Dial (Knob)
- 8 - LCD Display with Backlight
- 9 - Indicates the motor iTroll is operating, If iTroll is NOT dual motor enabled, this is always "1". If dual motor enabled, it is a "1" or "2", depending on which motor the iTroll is operating.

## Display Notice

iTroll has prompts on its display to aid you in operating it.  
A DOWN ARROW (↓) in front of a button name means to press that button.  
**EXAMPLE: ↓Hunt means "Press the Hunt Button"**

### Section 1: Turning iTroll On and Off

Turn iTroll On: Press **On** Button. iTroll goes to Manual throttle control (Section 2).

Turn iTroll Off: Press and HOLD **Off** Button for 3 seconds.

### Section 2: Manual Throttle Operation

2.1: Start motor and let it warm up until it idles smoothly. Turn iTroll on.

2.2: TILLER motors: Release tension knob on throttle handle to prevent sticking, place motor at idle speed and engage forward gear.

REMOTE THROTTLE motors: Put motor in gear and at idle speed.

2.3: If the display reads "Turn Dial to Zero", iTroll is in "dial safety interlock" because the dial is above zero, and it has to be turned to zero before it will control the motor's throttle. This prevents the boat from accelerating without operator input. Please see Section 14.3 in the "Shortcuts" section for additional information on this interlock.

2.4: Set desired motor speed with speed control dial. iTroll displays throttle setting in %.

2.5: **Neutral Safety Feature (remote throttle motors only). Note: For neutral safety feature to be operational, the installation of the OPTIONAL neutral safety interface is required!** Moving your boat's gear shifter from in gear to neutral will place iTroll in idle. This feature prevents damage to your gear box as the motor will be at idle speed when it is put back into gear. When shifter is put back in gear, iTroll will return to Step 2.3 above.

2.6: **Idle / Run** button - Used when you hook a fish:

When trolling, pressing this button idles the motor to allow you to fight the fish with the boat at minimum speed. Once fish is released or boated, resume trolling by pressing the button again. **See "DRAG Mode" (3.2) as it adds function to the Idle / Run button.**

2.7: **Max** Throttle button:

The Max button is used to apply a burst of power to raise lure depth, set hook after a fish strike, or to apply extra power when needed to control boat in windy conditions.

**iTroll Pro Staff Tip! Use Max button to rapidly let line out once bait "grabs" water. Watch for strikes! - The falling bait often gets hit!**

iTroll's Max throttle button has a industry first feature, "SCS" - Secondary Cruising Speed See section 3.1.

2.8: Last Idle Recall: Every time the Idle / Run button is pressed, iTroll stores the current throttle level in a memory slot. There are three memory slots for this purpose. Press the **Hunt** button to **display the last three throttle levels** prior to using Idle / Run button (2.6). Most often these are the speeds where you last hooked fish.

- 2.9: Hunt Enabled iTroll's only - Enter HUNT Mode by:
- A) First idling the motor by pressing the **Idle** button.
  - B) Enter HUNT Mode by pressing the **Hunt** button.

See Section 4 for HUNT Mode Description / Operation

## Section 3: iTroll's Special Features

### 3.1: "SCS" - Secondary Cruising Speed

iTroll's Max throttle button has a industry first feature, "SCS" - Secondary Cruising Speed that allows you to set / maintain a higher throttle setting than where the dial is set . . . WITHOUT touching the dial! This allows you to raise your baits when crossing low spots or to use a higher throttle setting to get your boat back on course after being hit by wind gusts or wakes. Without "SCS" you would lose and have to reset your troll speed because dial movement would be required to increase throttle.

To use SCS: When increasing throttle with the **Max** throttle button, you can STOP the throttle from advancing and LOCK in that particular throttle setting by pressing the **Idle / Run** button. iTroll will HOLD that throttle setting until you release it by pressing the **Idle / Run** button.

### 3.2: DRAG Mode

**Note: DRAG Mode is a STANDARD feature of iTroll, but it can be turned on and off to suit your preferences. All iTroll units ship with DRAG Mode OFF. To turn DRAG Mode on or off, see the "OPTIONS MENU" in section 11.**

3.2.1: DRAG Mode (when ON), changes the standard function of the Idle / Run button from two stage operation (Troll or Idle) to a three stage operation (Troll / Drag / Idle). **Drag is simply a throttle setting lower than troll and higher than idle.** When trolling, DRAG Mode allows you to go to a slower throttle setting that is higher than idle so you can fight fish while maintaining the boat's heading or to minimize the chance of baits snagging bottom. Especially useful when fishing planer boards and / or downriggers!

3.2.2: If DRAG Mode is ON and the throttle setting being used to troll is HIGHER than the stored DragSpeed setting, the first press of the Idle / Run button takes you to the DRAG Mode screen. **DragSpeed can be adjusted on the fly from a low of .5% to a high of 75% of allowable throttle in .5% steps by pressing the Hunt button to increase and the Max button to decrease (See prompts on screen).** Pressing the **Idle / Run** button when in DRAG Mode idles the motor. Another press of the **Idle / Run** button resumes troll.

3.2.3: Finding stored DragSpeed: Note: DRAG Mode must be On.

When using the **Max** throttle button in manual mode, DragSpeed is shown on display.

3.2.4: DRAG Mode Safety:

If your trolling speed is LESS than the DragSpeed stored in memory, DRAG Mode will not appear when you press the Idle / Run button. This happens because troll speed is less than DragSpeed and iTroll will not accelerate the boat when you expect the throttle to be reduced.

To make DRAG Mode functional again, raise troll speed higher than DragSpeed (see 3.2.3 to find DragSpeed), press Idle / Run button to enter DRAG Mode. Lower the DragSpeed by pressing MAX button until it is lower than troll speed.

### 3.3: Optional Remote Idle / Run switch(es)

You can purchase (at additional cost), sealed touch pads that can be mounted anywhere in your boat. Additionally, you can run multiple pads in different locations! These touch pads work EXACTLY like the Idle / Run switch on iTroll's main key pad. You can mount these pads anywhere you like, at the transom, bow or on the gunnel. See the electronics installation manual for wiring instructions.

### 3.4: DUAL MOTOR Capability

Optional software upgrade to allow a single iTroll to control two motors. See Section 12 for details.

## Section 4: Description of HUNT Mode Programmable Throttle Sequences to maximize your catch!

4.1: HUNT Mode is a software upgrade that is in every iTroll. **Once unlocked, HUNT Mode is permanently enabled for the life of your iTroll.** Call your dealer or Innova (maker of iTroll) at (909) 971-0000 to purchase an unlock code. Please note that unlocking HUNT Mode is performed in the field and takes just a few minutes.

There are multiple reasons why the most successful tournament fishermen and top guides insist on iTroll (reliability, precision, quality, etc.), but the **BIGGEST** reason is HUNT Mode! **HUNT Mode makes every angler better because IT CATCHES FISH!**



Captain Joel Piatek never fishes without his iTroll.  
Photo from taping of the TV show "Lund Ultimate Fishing Experience"

Simply put, HUNT Mode allows you to run programmable throttle sequences with your iTroll. Varying speed makes your presentations look more realistic and is THE answer to any troller's worst nightmare - the "Speed Rut". Many anglers steer their boats in "S" patterns to vary their speed, but HUNT Mode can achieve much greater speed variations while doing it automatically and with robotic precision!

HUNT Mode is the most revolutionary feature ever put into a throttle controller. Before iTroll, controllers were only reactionary and took a passive role in the catching experience.

In comparison, an iTroll running in HUNT Mode is literally stalking the fish and taking an ACTIVE role in your angling success. It's no wonder that an iTroll in HUNT Mode is considered to be **"The Deadliest Tool in Fishing"**!

HUNT Mode runs three unique types of throttle sequences:

#### 4.2: Stepping (Searching) Programs:

You program low and high throttle settings and iTroll will step up and down between them. You set a step size for iTroll to determine how many steps there are between the throttle settings. Stepping programs excel in finding what speed / bait combination works best.

Example: You can set a program to vary the boat's throttle from 10% to 20% in 3% steps, with each step being held for one minute.

For this program, the throttle will behave as follows:  
10% - 13% - 16% - 19% - 20% - 17% - 14% - 11% - 10% . . .repeat.



10-20% 3.0% 1m  
1A 16.0% ↑ 0:15

*Searching programs are the most efficient way to find what baits and speeds are the most productive to fish. If you look at the speed program in the previous paragraph, there are eight speeds. If there are 6 different baits being trolled, HUNT Mode makes 48 bait / speed presentations (6 baits X 8 speeds) to the fish every 8 minutes!*

#### 4.3: Cut throttle Programs (Simulates a wounded bait):

Cut programs are two speed programs where your trolling speed is "CUT" to a slower speed at programmable intervals. You choose the time parameters as to how often the throttle is cut and how long the cut lasts. Time at troll is programmable in minutes (1-12) and cut duration time is programmable in seconds (1-60).

Example: You can set a program to troll at 15% throttle for one minute,

then cut the throttle to idle (0%) for 10 seconds before returning to 15% and repeating the pattern:  
For this program, the throttle will behave as follows:  
15% - one minute - 0% - ten seconds - 15% repeat.



0% - 10s 15% - 1m  
1e 0.0% ↑ 0:04

Bait behavior in cut programs can be customized by how large / small the cut is and how long the throttle stays cut.

#### 4.4: BUMP throttle Programs (Simulates a fleeing bait):

Bump programs are two speed programs where your trolling speed is "BUMPED" to a higher speed at programmable intervals. You choose the time parameters as to how often the throttle is bumped and how long the bump lasts. Time at troll is programmable in minutes (1-12) and bump duration time is programmable in seconds (1-60).

Example: You can set a program to troll at 15% throttle for one minute,

then bump the throttle to 20% for 10 seconds before returning to 15% and repeating the pattern:  
For this program, the throttle will behave as follows:  
15% - one minute - 20% - ten seconds - 15% repeat.



15% - 1m 20% - 10s  
1G 15% ↑ 0:04

Bait behavior in bump programs can be customized by how large / small the bump is and how long the throttle stays bumped .

### HUNT Mode program memory:

iTroll stores EIGHT individual HUNT programs in internal memory. You can now have HUNT programs for different conditions (example: fishing up wind or down wind), or for different baits / presentations (example: bottom bouncers vs. stick baits). The memory positions are allocated as follows: FOUR for stepping programs, and TWO EACH for cut and bump programs ( $4 + 2 + 2 = 8$  total).

Having multiple HUNT programs in memory enhances efficiency and convenience. For instance, you can have two separate stepping programs in memory that do essentially the same behavior when running against the wind and with the wind. The difference in the programs is one has more aggressive throttle settings than the other.

If you are running into the wind with one program and turn your boat around, it only takes a few seconds to switch to the other program to troll with the wind.

### Tips from iTroll's designer on mastering the ULTIMATE power of Hunt Mode:

#### HUNT programs A - D:

- Make your Hunt programs stop at different speeds on the way up than on the way down for MAXIMUM speed variety! Subtract your MinSpeed setting from your MaxSpeed setting. If the difference is an EVEN number, use ODD steps and vice - versa. See 4.2 for an example.

- When Hunt finds a speed that the fish prefer (let's use 18% as an example), DON'T go to manual throttle and static troll at 18%! Reprogram your Hunt parameters to bracket 18% so when the fish's speed preference changes (it always will), you will notice the pattern where strikes occur and can simply re-bracket your Hunt parameters up or down accordingly! A sample program that brackets 18% might be (15-20%, 2%, 1 Min). This Hunt program will cover these speeds: 15% - 17% - 19% - 20% - 18% - 16% - 15% - repeat. Please note that we used this tip WITH the previous one to cover EVERY speed from 15 - 20%!

- The previous bracketing program is more effective than a straight 1% step program (example: 15-20%, 1%, 1 Min) that hits the same speeds because the baits have more of a "fleeing" or stalling action during a speed change with the 2% step program.

- HUNT programs e, f, G & H:

You can vary your presentation by varying the degree and duration of your cut or bump speeds. Put a bait in the water and try a moderate cut or bump (5%) for 10 - 15 seconds vs. a larger cut or bump (10 - 15%) for 1 - 4 seconds.

## Section 5: HUNT Mode User Interface

5.1: When you enter HUNT Mode, the first screen to be displayed is called the "Start" screen because it contains the word start. In the start screen, you can do two things:

Toggle through the eight HUNT programs that are stored in memory by pressing the **Max** button. In the bottom left corner, each program has a unique letter from A to H to identify it.

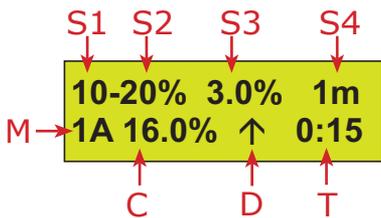


Start the HUNT program that is displayed by pressing the **Hunt** button.

5.2: In the "Start" screen (above), and the "Run" screens (next page), the display's top line shows the parameters of the HUNT Program that is selected. **HINT: Note that the lower throttle setting is always presented first.** In the "Run" screens, the bottom line shows the program's address and where you are in the program when it is running:

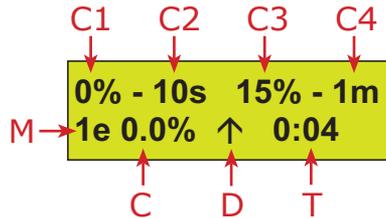
### Stepping / Searching Programs:

Memory addresses A - D (see M, below):



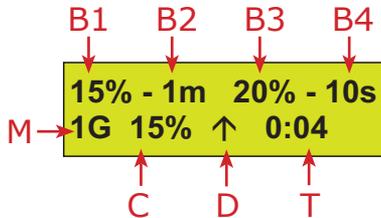
### Cut Throttle Programs:

Memory addresses e - f



### BUMP Throttle Programs:

Memory addresses G - H



"N. C." - Lake Michigan

### STEPPING / SEARCHING program parameters:

- S1 = "MinSpeed" (Low throttle setting of the program)
- S2 = "MaxSpeed" (High throttle setting of the program)
- S3 = "Throttle Step Size" (1 - 15%)
- S4 = "Step Time" (Minutes between steps from 1 - 12)

### CUT program parameters:

- C1 = Cut (Low) throttle setting
- C2 = Cut time in seconds (1-60)
- C3 = Trolling (High) throttle setting
- C4 = Trolling time in minutes (1-12)

### BUMP program parameters:

- B1 = Trolling (Low) throttle setting
- B2 = Trolling time in minutes (1-12)
- B3 = Bump (High) throttle setting
- B4 = Bump time in seconds (1-60)



"G. J." - Lake John Resort - Colorado

### ALL PROGRAMS: The bottom line shows where you are in the HUNT Program:

- M = Memory address of the HUNT program that is being run
- C = Current throttle level
- D = Direction of next step (Up or Down)
- T = Time remaining until throttle step occurs

## Section 6: Operation of iTroll in HUNT Mode

HUNT Enabled or HUNT Test Drive iTroll units only

**Online HUNT Mode Tutorial & Description:**

<http://itroll.us/iTroll.downloads/iTroll.Hunt.tutorial.pdf>

**If using HUNT Mode for the first time, you must set Hunt's safety limits for your particular boat - see sections 8 AND 9. Additionally, the Hunt parameters initially programmed into your iTroll are very conservative and will most likely need to be reprogrammed (step 6.3 below).**

*Hunt Mode is accessed through Step 2.9 of manual control of the throttle, repeated here:*

2.9: Hunt Enabled iTroll's only - Enter Hunt Mode by:

- A) First idling the motor by pressing the **Idle** button.
- B) Enter HUNT Mode by pressing the **Hunt** button.

6.1: HUNT "Start" screen top line shows the parameters of the HUNT program that is currently loaded (described in Section 5). Bottom left corner shows the HUNT program address. Hunt programs are designated as 1A - 1H for motor 1. In dual motor enabled units, HUNT program addresses for motor 2 are designated as 2A - 2H. Note that the "e" and "f" program addresses are in lower case for easy identification of throttle "cutting" programs.

To access a different program than the one that is being displayed, toggle between HUNT programs by pressing the Max button when the HUNT "Start" screen is displayed.

6.2 As directed on screen, press **Hunt** button to run the HUNT program being displayed.

6.3: To change any of the Hunt Parameters OR any of the Hunt Safety Limits:

**STEP 1:** Idle the motor by pressing and releasing the **Idle** button.

**STEP 2:** Press the **Hunt** and **Max** buttons **at the same time** and then reference Section 7 of these instructions.

6.4: When a HUNT program is running, you can jump to the next throttle step by pressing the **Hunt** button. **It is easy to determine that you are running a HUNT program because the timer in the display will be running.**

The ability to **change speeds on demand** before HUNT Mode's timer would do so automatically is a powerful tool. If you see fish on your graph, you can estimate when the baits are right on top of them and you can force iTroll to change speeds (go to the next step in the HUNT program) **by pressing the Hunt button!**

6.5: If you get a hook up, pressing the **Idle** button takes you directly to motor idle or to DRAG Mode, depending on throttle level and if DRAG Mode is on (see 3.2).

6.6: When motor is idled, pressing the **Run** button will resume the Hunt program.

6.7: The **Max** button is used to apply a burst of power to rapidly let line out, raise lure depth, set hook after a fish strike, or to apply extra power when needed to control boat in windy conditions. When Max button is released, Hunt Mode resumes. The "SCS" (Secondary Cruising Speed) feature described in 3.1 also works with HUNT Mode.

6.8: Return to "Start" screen by pressing **Off**.

**Returning to the "Start" screen allows you to change HUNT programs (6.1) or to turn HUNT Mode off and return to manual mode (6.9).**

6.9: To exit Hunt Mode and return to manual throttle control, simply press and release the **Off** button.

## Section 7: Reprogramming HUNT Parameters

CAUTION! NEVER use a step size between throttle settings that may cause the boat to accelerate or decelerate to a degree that can cause occupant(s) to lose their balance!

### Parameter Reprogramming Screen Operation

When reprogramming mode, four menus are presented (one for each parameter that is in a given HUNT program). In each menu, the **stored (old) parameter value is shown in the upper right corner**. Turning the dial will show a **new parameter value in the lower left corner**.

These menus allow you to do one of two things:

Pressing the **OFF button** keeps parameter unchanged and **SKIPS** to the next menu.

To **CHANGE** a parameter, turn the dial until the display reads the new parameter value you desire and you **STORE** it by pressing the **Hunt button**.

After the last (fourth) menu, programming is completed. The start screen will appear where you can execute the modified HUNT program by pressing the **Hunt button**.

**Hunt Mode programming is accessed through Step 6.3, repeated here:**

6.3: To change any of the Hunt Parameters OR any of the Hunt Safety Limits:

**STEP 1:** idle the motor by pressing and releasing the **Idle button**.

**STEP 2:** Press the **Hunt** and **Max** buttons **at the same time** and then reference Section 7 of these instructions.

7.1: You will now see the screen to change the first parameter.

**7.1A: SKIP this step if you do NOT want to reprogram the Hunt Low and High limits:**

If you would like access the menu to change the Hunt Low and High limits, press the **Idle** and **Max** buttons **at the same time**. These limits are described in Section 8.

7.2: **When a reprogramming menu is accessed, you can do one of two things:**

**A: You can change the parameter by turning the dial. When iTroll's display shows the new value that you want to store, press the **Hunt** button.**

**B: If you want to leave the parameter unchanged, you can skip to the next menu by pressing the **Off** button.**

Note: The LOW throttle value of a HUNT program MUST be LESS than the HIGH throttle value. The high setting is dependent on the low setting. In programming, the LOW throttle is set first, and if is reprogrammed to a number that is the same or greater than the high throttle, iTroll recognizes this and **will not allow you to skip the screen to reprogram the higher throttle setting**. You MUST reprogram the high throttle value so that it is GREATER than the low throttle value.

7.3: Parameters for Stepping Memory addresses 1A - 1D and 2A - 2D:

Menus are presented in this order in the programming sequence:

MinSpeed | MaxSpeed | StepSize | StepTime

7.4: Parameter menus for Cut Memory addresses 1e - 1f and 2e - 2f:  
Menus are presented in this order in the programming sequence:  
CutSpeed | CutSpeed Time (in Seconds) | TrollSpeed | TrollSpeed Time (in Minutes).

7.5: Parameters for Bump Memory addresses 1G - 1H and 2G - 2H:  
Menus are presented in this order in the programming sequence:  
TrollSpeed | TrollSpeed Time (in Minutes) | BumpSpeed | BumpSpeed Time (in Seconds).

iTroll Pro Staff Tip! For best precision keep step size to smallest value that makes a noticeable change in boat speed. Smaller step times work better. Its better to try 9 speeds in 9 minutes (1 minute steps) rather than staying at one speed for 9 minutes (9 minute steps).

7.6: iTroll will return to the HUNT Mode start screen (6.1) where you can execute the new program by pressing the **Hunt** button.

## Section 8: Determine Safety Limits of HUNT Mode for Your Boat

### HUNT Enabled or Hunt Test Drive iTroll units only

**HUNT Mode has two limits that are typically set only ONCE for a specific boat. If needed, these limits can be changed at any time if the amount of weight in the boat varies a lot or if the boat is used in greatly varying altitudes (motors lose power at altitude).**

8.1: Hunt Low Limit (HLL):

This sets a ceiling on the MinSpeed value of a HUNT program. This is a convenience limit so you don't troll too fast.

8.2: Hunt High Limit (HHL):

This sets a ceiling on the MaxSpeed value of a HUNT program. This is safety limit! iTroll is NOT designed to control boat at high speeds.

There are many variables in boats (hull design, weight, motor HP, prop design, altitude, etc.). A water test is necessary to determine the best Low and High limits for a particular boat. Note: If your iTroll is set up to control dual motors, iTroll remembers independent limits for EACH motor. Determine the values for both your MAIN and SECOND motors.

8.3: It is assumed that you are familiar with the basic operation of iTroll as described in Section 2. If not, spend some time operating your boat using iTroll.

8.4: On a stretch of water free from obstructions and other boat traffic, run an assortment of baits close to your boat so you can see their "action". It may be necessary to place the rod tip in the water to get bait deep enough to see it's action. Using iTroll's display, note the slowest and highest speeds where your baits have acceptable action. Write down these speeds so they can be used for Low and High limit programming. Take note of wind and current conditions as you may have to compensate for them when setting the limits.

## Section 9: Programming HUNT Mode Low and High Limits

### HUNT Enabled or HUNT Test Drive iTroll units only

HINT: Make limits slightly higher than values found in 8.4 so you can use slightly higher throttle settings if boat loading or weather (wind) requires more throttle than when the test was performed.

9.1: The menu to reprogram the HUNT Low and High limits are a side menu when you program iTroll's regular parameters. Simply follow the steps in Section 7 and make sure you **perform Step 7.1A**.

9.2: Turn dial to enter HLL (Hunt Low Limit), store value by pressing **Hunt** button.

9.3: Turn dial to enter HHL (Hunt High Limit), store value by pressing **Hunt** button. iTroll returns to 7.1.

## Section 10: Left and Right Steering Buttons

iTroll can control other manufacturer's steering units (NOT included with iTroll) that link to your kicker motor. Contact the manufacturer of your particular steering unit for instructions on how to interface it with iTroll. Please see iTroll's installation instructions for technical information on steering outputs.

iTroll's steering buttons only operate when iTroll is ON.

## Section 11: Options Menu

11.1: iTroll's options menu allows you to:

**A:** Select the motor that iTroll will run (only dual motor enabled units).

**B:** Turn DRAG Mode On or OFF

**C:** Set / change the throttle safety limit that restricts the throw of the servo that pulls on the motor's throttle.

11.2: To access options menu:

Approximately 3 seconds after you turn your iTroll on, there is a prompt to access the options menu by pressing the **Hunt** button.

11.3: Menu items:

**A:** Motor selection. ONLY appears if your iTroll is Dual Motor Enabled.

**No user input after 5 seconds OR pressing Off button skips to next menu item.**

Press **Idle** to select **Motor 1 operation**.

Press **Max** to select **Motor 2 operation**.

**B:** Turn DRAG Mode On or Off

**No user input after 5 seconds OR pressing Off button skips to next menu item.**

Press **Idle** to turn **DRAG Mode ON**.

Press **Max** to turn **DRAG Mode OFF**.

**C:** Set / change Throttle Safety Limit:

**No user input after 5 seconds OR pressing Off button exits options menu.**

**CONFIRM** desire to change safety limit by pressing the **Max** button when prompted.

Please note that **LOWERING** safety limit will **RESET** all your **HUNT** parameters and **DragSpeed** value to insure that no parameters are above newly lowered limit.

Use dial to display the throttle limit you desire.

**STORE new limit** by pressing **Max** button.

iTroll exits options menu and goes to 2.3.

## Section 12: Optional Dual Motor Control

Dual Motor Mode is a software upgrade that is in every iTroll. When dual motor enabled, iTroll can control two motors on the same boat. These motors can be a kicker and a main or a pair of mains on a boat with twin outboards. Note: Servo motor / linkage installation is required on throttle of second motor to allow iTroll to control it. These parts do require an additional purchase.

If an iTroll is both Dual Motor and HUNT Enabled, it has separate HUNT programs for EACH motor. Additionally, iTroll has the ability for you to set unique safety limits for each motor.

## Section 13: Other user programmable items

13.1: iTroll has a digital padlock that allows purchased unlock codes for HUNT Mode and Dual Motor software upgrades to be entered. Additionally, there are features that must be accessed behind the padlock so they cannot be accidentally changed. Items protected behind padlock:

13.2: Programmable Servo Travel & Rotation

**Servo travel AND rotation are typically set upon initial installation of iTroll and does NOT need changing unless the iTroll is moved to a different motor.**

Changing servo travel and / or rotation on an existing installation can jam the servo and possibly bend linkage parts because you are changing the starting point and throw of the servo motor.

If you are 100% sure that you want to change an existing installation, remove servo arm from servo so that there is NO connection to the motor when iTroll re-zeros the servo when you turn it on after changing rotation and / or travel.

Combination to access servo rotation and travel menus: 3 - 8 - 33 - 88.

Menu to set travel appears first, rotation menu follows.

S = 90 degrees

M = 135 degrees

L = 180 degrees

**Note: 180 degree rotation requires specially programmed servo from factory.**

13.3: Neutral Safety Interface Recognition - Combination to turn on or off: 5 - 5 - 5 - 5.  
After combination is entered, display reads NS = 0 to confirm off, NS = 1 to confirm ON.

13.4: How to access the Digital Padlock:

**Note: iTroll must be OFF.**

13.5: The Digital Padlock is accessed by **HOLDING** the **Idle** button down, then **HOLD** the **Max** button down (at this point you are holding down two buttons), then press and release the **On** button. The Digital Padlock will activate and the screen will read "Lock #1".  
**IMPORTANT - RELEASE ALL BUTTONS!**

13.6: Turn the dial so the number on the display's second line matches the first number in the unlock combination you are using. Make sure number is NOT flickering.

Flickering indicates that you are between two numbers and will result in an invalid entry. Press the **Hunt** button to enter the number, screen will read "Lock #2".

13.7: Repeat step 13.6 to enter all four numbers in the unlock combination.

13.8: If you see the message "Invalid Combo", repeat Steps 13.4 - 13.7.

## Section 14: Shortcuts

There are a few shortcuts in iTroll's programming:

**14.1: Start your iTroll in HUNT Mode - Get fishing faster! HUNT enabled units only.**

Go directly from off to HUNT Mode by pressing and HOLDING the **Hunt** button and then pressing and releasing **On**. **Make sure you keep the Hunt button depressed for at least 1/2 second after you release On.** Tip: Think "HUNT On".

**14.2: Rapid Off:**

Pressing the **Max** button when off sequence is counting down turns iTroll off immediately.

**14.3: Preserve throttle setting when turning iTroll off and back on:**

Turning iTroll off does not require dial movement. However, when you power the unit off, the "dial safety interlock" in 2.3 tells you to turn the dial to zero to engage the throttle. Turning the dial loses the throttle setting of the dial. There is a way around this and it involves the other prompt on the screen that directs you to press the **Idle** button.

Pressing the **Idle** button the first time takes you to engine Idle, pressing it again engages the throttle to where the dial is set . . . without touching it!

## Section 15: A free trial of iTroll's HUNT Mode

If you have not purchased the software upgrade to permanently enable HUNT Mode, every iTroll has a 100% free "test drive" of HUNT Mode. Once activated, the test drive allows you to use HUNT Mode for the next 50 On and Off cycles of your iTroll. Once the 50 cycles are used, the test drive ends.

To activate the test drive, you must access iTroll's exclusive "Digital Padlock" (See 13.4) and enter the unlock code "0 - 0 - 0 - 0". Note: If the test drive has already been used in your iTroll, you will see "Invalid Combo" after the code is entered on iTroll's display instead of the Test Drive confirmation screen.

When using the Test Drive, there will be a screen that appears when you turn on your iTroll that tells you how many times you have used the Test Drive.



"Rosemary" - Alaska



"R. G." Lake Erie



"The 'K' Family" - Lake Michigan

## iTroll Limited Warranty

Innova Design & Distributing, Inc. (Innova) warrants iTroll to be free from manufacturing defects under normal use and conditions for two (2) years from date of original user purchase. Innova, at its sole discretion, will either repair the product or replace the product, provided the manufacturing defect is verified along with proof of purchase. To obtain warranty service call 1-909-971-0000.

This warranty is void if the product is:

- A) Damaged through negligence, misuse, abuse or accident.
- B) Modified, repaired, or tampered with by anyone other than Innova.
- C) Units on which the serial number has been defaced, modified or removed.

This warranty does NOT cover:

- A) Damage due to improper installation.
- B) Fire, smoke, or heat damage.
- C) Damage or improper operation of unit caused by customer abuse, misuse, negligence, or failure to follow correct installation procedures as provided with product.
- D) Costs of shipping of the product to and from Innova for warranty service

This warranty is non-transferable and applies only to the original purchaser and does not extend to subsequent owners of the product. Any applicable implied warranties, including the warranty of merchantability, are limited in duration to a period of the expressed warranty as provided herein beginning with the date of original purchase at retail and no warranties, whether expressed or implied, shall apply to the product thereafter. Innova makes no warranty as to the fitness of the product for any particular purpose or use. The extent of Innova's liability under this limited warranty is the repair or replacement provided above and, in no event, shall Innova's liability exceed the purchase price paid by the purchaser of the product. Under no circumstances shall Innova be liable for any loss, direct, indirect, incidental, special, or consequential damage arising out of or in connection with the use of this product.



*Kodiak Island, Alaska*



*"R. G." - Flaming Gorge Reservoir  
Utah / Wyoming*



*"R. D." Strawberry Reservoir, UT*

# **INNOVA**

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