

NOTES



Owners Manual & Safety Instructions



rev 0.7d

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS:

This manual contains important safety and operating instructions for the operation of this unit.

**CAREFULLY READ THESE INSTRUCTIONS BEFORE
INSTALLING OR USING PRODUCT.**



EXTREME CAUTION SHOULD BE USED WHEN OPERATING THIS SYSTEM TO PREVENT SERIOUS INJURY

LIMITED WARRANTY AND LIMITATION OF LIABILITY



Fish ConTroll Head



Fish ConTroll Hub

All electrical components manufactured and marketed under Hurley Marine, Inc., are warranted to be free from defects in material and workmanship under normal and proper use for a period of 90 days from date of shipment from Hurley Marine, Inc. No claim for breach of warranty will be allowed unless the material or workmanship is found defective within the warranty period, properly documented by buyer and Hurley Marine, Inc. is notified in writing within 10 days from failure. This warranty shall not apply to products that have been disassembled, altered, or utilized in a manner not approved by Hurley Marine, Inc. or subjected to normal wear and tear, abuse, misuse, improper maintenance, negligence or accident.

CUSTOMER AGREES THAT USE OF THE PRODUCT/SERVICE IS ENTIRELY AT CUSTOMER'S OWN RISK. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE ACCEPTED BY BUYER IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. Buyer's sole remedy in the event of a breach of the foregoing warranties is the repair or replacement of the affected product by Hurley Marine, Inc., upon the return of the product transportation charges prepaid to Hurley Marine, Inc., and after a charge to buyer for the use of the product prior to its return. BUYER AGREES THAT IN NO EVENT WILL HURLEY MARINE, INC'S LIABILITY FOR ALL LOSSES FROM ANY CAUSE, WHETHER BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE, EXCEED BUYER'S NET PURCHASE PRICE, NOR WILL HURLEY MARINE, INC, BE LIABLE FOR ANY SPECIAL, INCIDENTAL CONSEQUENTIAL OR EXEMPLARY DAMAGES.

Under no circumstances is Hurley Marine, Inc. responsible for reimbursement of expenses related to vessel haul-outs, technician or yard personnel, travel expenses, yacht storage, labor performed during removal and/or replacement of fixture(s), or shipping costs for replacement parts. These are assumed liabilities of the customer and part of the terms of sale between Hurley Marine, Inc. and its customer.

The foregoing warranties will continue in effect for so long as the product is serviced and maintained in accordance with Hurley Marine, Inc. instructions and with genuine Hurley Marine, Inc. manufactured replacement parts. These warranties may not be altered or amended except by a written instrument signed by buyer and a duly authorized officer of Hurley Marine, Inc. For warranty or service assistance contact your Hurley Marine, Inc. dealer.

TERMS OF SALE / SHIPPING

RETURN POLICY: If you are dissatisfied with your purchase, contact us within 30 days from the date of product purchase. Products returned within 30 days of their receipt, unopened in their original packaging and otherwise in new condition will automatically be exchanged or refunded. A minimum fee of 25% of the price of the product will be charged for inspection, repacking and restocking for items not returned in their original condition. Other fees may apply depending upon the condition of the item. Products are not returnable after 30 days.

EXCHANGE / REFUND PROCEDURE:

- All returns must have a copy of a paid invoice, contact information and a brief description of the reason accompanied with the return.
- Properly repack the product in the original packaging and place inside a box suitable for shipping with all the original enclosures, parts, and accessories.
- Return it with **original receipt** and postage pre-paid (we do not accept C.O.D.), add appropriate insurance.
- Shipping and packing fees are non-refundable.

NON-RETURNABLE ITEMS: Inflatable boats, installed/mounted items, damaged goods, clearance/discount items, used and/or display items, electrical goods, light bulbs and special ordered items are not returnable, unless defective, and then for repair/replacement only. If the product is defective you must call Hurley Marine, Inc. within 10 days of receipt of the product.

DAMAGES GOODS: We thoroughly inspect all items prior to shipment. We suggest that you also thoroughly inspect the item(s) before accepting delivery. If damage is apparent, refuse delivery or if your parcel is left without a signature and damage is found contact the carrier immediately. Do not discard the box or any packaging materials. Most claims must be filed with the carrier within 10 days of receipt of delivery. Although we take special care to ensure the safe arrival of your merchandise, our responsibility for damage ends when the carrier accepts shipment.



Head to Hub Cable



Servo Cable



Fish Hawk™ Harness

If previously in automatic mode:
 Overrides automatic control.
 Returns to automatic mode and previous throttle setting when idle button is pressed again.

If previously in manual mode:
 Overrides manual control.
 Returns to manual mode and previous throttle setting when idle button is pressed again.
 Can adjust throttle at any time using the knob.

Alarms

An audible and visible alarm are generated when any of the following conditions occur:

- High speed (if enabled)
- Low speed (if enabled)
- Low battery (if voltage falls below 10.5 Volts)

The red LED will flash, the alarm will sound if the speaker is enabled (see Setup Mode section) and the alarm display will appear every two seconds. This condition will persist until any button is pressed or the alarm condition goes away.

Appendix

Specifications

- Supply voltage: 7.5 – 17 VDC
- Supply current: up to 1.5 Amp, 0.2 Amp idle, <0.02 Amp off
- Supply fuse: 2.0 Amp

Fish Hawk™ is a registered trademark of Fish Hawk Electronics

TROLLMaster™ is a registered trademark of Marine Tech Product



Notes

Thank you for purchasing the Hurley Marine Fish ConTroll. Designed by fishermen for fishermen, the Fish ConTroll will reduce the amount of effort required to troll by automatically maintaining trolling speed so you can focus more on fishing.

Overview

The Fish ConTroll continuously adjusts the motor throttle to maintain speed based on the built-in GPS receiver. If the Fish Hawk™ system is installed the Hurley Fish Hawk™ Plug & Play harness must be purchased to allow topside or lure speed to be maintained.

INSTALLATION

Throttle servo

A throttle servo is required for the Fish ConTroll to adjust the throttle of the motor. They are available from several companies, such as:



- **TROLLMaster™** - <http://www.marinetechproducts.com/shop-for-parts#!/Trollmaster-Hardware-Kits/c/8617236>

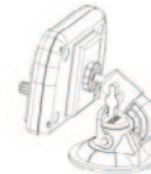
- **iTroll™** - <http://www.itroll.us/itroll.app.guide.html>

A word on engine condition . . . There must be a good throttle range (should be smooth, avoiding abrupt changes in RPM). Engine must be in good tune or throttle surging may be experienced.

It is always a good idea to give the motor a tuneup. Be sure to use Fresh fuel.

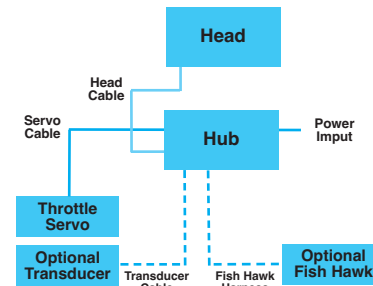
Head Mounting

Attach the head mounting bracket to the back of the head unit. The bracket may be mounted to a clean smooth flat surface such as a dashboard or window.



Power Supply

12 Volt power must be connected to the hub power jack via a 2 Amp fuse. The hub accepts a 5.5 x 2.1mm DC barrel plug. Once connected, the hub should be located in a dry area and fastened down.



Fish ConTroll Connection Diagram

IMPORTANT: Once power is connected, be sure to turn on the power switch on the right side of the hub. This is a secondary power shutoff to completely eliminate power draw if desired.

Power on/off

Press the rocker switch under the right side of the Fish ConTroll head to the right to turn power on, or to the left to turn power off. The display backlight will turn on and the startup page is shown, indicating that the Fish ConTroll is on.

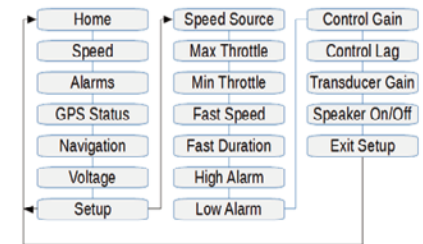
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| FISH CON-TROLL |
| VERSION X.X   |
  
```

Setup

The Fish ConTroll must be tuned before use to maximize performance for the characteristics of the boat and the trolling motor. Initially, the **control gain** should be set to **2** and the **control lag** should be set to **4**. Other parameters include speed source, maximum and minimum throttle limits, fast mode throttle and duration, high and low speed alarms, transducer gain, and speaker on/off. See **Setup Mode** section (page 4) for details.

NAVIGATING SCREENS



Display Tree

Home button

Pressing the HOME {left arrow} button selects the home display.

Page button

Press the PAGE {right triangle} button to select the next display.

Home

If the GPS is selected as the speed source, then the home display appears as:

```

| 01.23 MPH   50% |
| GPS        MANUAL |
  
```

The speed shown is 1.23 MPH, and the throttle is 50%. The control is in manual mode. If the GPS is not locked, the speed will appear as “-.-” and the Fish ConTroll will switch to manual mode.

If the optional Fish Hawk™ system is connected and powered on, and the topside or lure speeds are selected as a speed source:

```

| 02.34M 61.3F 63% |
| TOPSIDE AUTO     |
  
```

From left to right, the speed is 2.34 MPH, the temperature is 61.3 degrees F, and the throttle is 63%. The control is in automatic mode. If the lure speed is used, the lure temperature is displayed. If the Fish Hawk™ signal is lost, the speed will appear as “-.-” and the Fish ConTroll will switch to manual mode.

Speed

GPS	TOP	LURE
XX.X	XX.X	XX.X

This display is only available if the optional Fish Hawk™ is connected and powered on. The speeds are expressed as MPH.

Alarms

ALARMS		
HIGH	ALARM	
LOW	ALARM	
LOW	VOLTAGE	

GPS Status

GPS	NO	FIX
GPS	FIX	
QUALITY:	XXXXXXXX	

GPS Navigation

NO	POSITION	--.
		U
AAAAAAAAAA	SS.S	
OOOOOOOOOO	U	
A=LATITUDE,	S=MPH	
O=LONGITUDE,	U=UNLOCKED/L=LOCKED	

Supply Voltage

SUPPLY	VOLTAGE
XX.X	V

Setup

SETUP	DISPLAY
PRESS	KNOB

Pressing the PAGE {right triangle} button again will return to the home display.

SETUP MODE

Entering setup mode

Press the PAGE {right triangle} button until SETUP DISPLAY is shown. Press the KNOB or OK button.

Navigating the setup menu

Press the PAGE {right arrow} button to select the next setup display. Values can be adjusted using the knob (clockwise to increase the value, counterclockwise to decrease the value.)

Speed Source

Use the knob to select GPS, LURE*, or TOPSIDE*. Only one source can be used at a time.

To select the GPS as the speed source:

SPEED	SOURCE
GPS	

If no GPS fix is available it will be indicated, however the setting is accepted. When a fix is acquired it can be used for speed control.

SPEED	SOURCE
NO	GPS

To select the optional Fish Hawk™ lure speed:

SPEED	SOURCE
LURE	

If no signal is available it will be indicated, however the setting is accepted. When a signal is acquired it can be used for speed control.

SPEED	SOURCE
NO	LURE SIGNAL

To select the optional Fish Hawk™ topside speed:

SPEED	SOURCE
TOPSIDE	

*Note: LURE and TOPSIDE are only available if the optional Fish Hawk™ system is installed and powered on.

Maximum Throttle

The maximum throttle feature prevents the controller from exceeding a set value. This only applies when the controller is in automatic mode.

MAX	THROTTLE
XX%	

Minimum Throttle

The minimum throttle feature prevents the controller from falling below a set value. This only applies when the controller is in automatic mode. It should be set just above the idle throttle value to prevent control instability when operating near idle throttle position.

MIN	THROTTLE
XX%	

Fast Speed

Sets the throttle position for FAST mode.

FAST	SPEED
XX%	

Fast Duration

Sets the duration of FAST mode before automatically returning to previous mode.

FAST	DURATION
XX	SECONDS

Turning time all the way down disables the duration timer so FAST mode will only disengage on demand.

FAST	DURATION
DISABLED	

High Speed Alarm

Sets the high speed alarm value.

HIGH	ALARM
XX.X	MPH

Turning the value all the way down disables the high speed alarm.

HIGH	ALARM
DISABLED	

Low Speed Alarm

Sets the low speed alarm value.

LOW	ALARM
XX.X	MPH

Turning the value all the way down disables the low speed alarm.

LOW	ALARM
DISABLED	

Tuning

The control gain determines how much throttle change is made relative to a change in speed. Setting this value too high will cause “hunting,” or cycling of the throttle. Setting this value too low will cause poor response to changing conditions, resulting in slow speed corrections.

CONTROL	GAIN
X	

The control lag is set based on how long it takes for the vessel’s speed to settle when a change in throttle is made. That is, the longer it takes for the vessel’s speed to reach a steady speed, the higher the control lag value should be. Setting this value too low will cause “hunting,” or cycling of the throttle. Setting this value too high will increase the time it takes to reach a desired speed, making the control sluggish.

CONTROL	LAG
X	

Transducer Gain*

If the optional Fish Hawk™ system is installed, adjust the transducer gain as needed. Typically, water depths of less than 100 feet require a low gain, while depths of 100 feet or more require a high gain.

XDUCER	GAIN
LOW	
High	

Speaker

Turn the speaker on to ENABLE audible alarms, or OFF to DISABLE audible alarms.

SPEAKER
ON
OFF

Exiting setup mode

Repeatedly press the PAGE {right triangle} button until EXIT SETUP is displayed.

Press the knob or OK button

PRESS	KNOB
TO	EXIT

*Only available if the optional Fish Hawk™ is connected and powered on.

USING THE FISH CONTROLL

Manual mode

The throttle is adjusted by the user and no automatic control takes place. Turning the knob clockwise will increase throttle, while turning the knob counterclockwise will decrease throttle.

Automatic mode

To enter automatic mode, press the AUTO button on the left side of the Fish ConTroll until “AUTO” appears on the bottom right of the display and the green LED turns on. The setpoint will be set to the current speed when the AUTO button is pressed and can be adjusted at any time using the knob. The controller will adjust the throttle as needed to keep the measured speed as close to the setpoint as possible.

Fast mode

Press FAST {up arrow} button to enter fast mode

FAST	MODE
03.52	MPH xx%

If no speed is available, fast mode may still be used:

FAST	MODE
--.--	MPH xx%

Press FAST {up arrow} again to leave fast mode

If previously in automatic mode:

Overrides automatic control.
Returns to automatic mode and previous throttle setting when fast button is pressed again.

If previously in manual mode:

Overrides manual control.
Returns to manual mode and previous throttle setting when fast button is pressed again.

Can adjust throttle at any time using the knob.

Idle mode

Press IDLE {down arrow} button to enter idle mode.

IDLE	MODE
03.52	MPH xx%

If no speed is available, idle mode may still be used:

IDLE	MODE
--.--	MPH xx%

Press IDLE {down arrow} button to leave idle mode.