



## Active Trim

# Quick Reference Guide



**Boatbuilder/Dealer:** Place in owner's bag  
**Boat Owner:** Place in glovebox for reference

### ***Congratulations on your purchase of Active Trim.***

*Active Trim is Mercury Marine's patented GPS-based automatic engine trim system. This intuitive, hands-free system continually adjusts engine trim for changes in operating conditions to improve performance, fuel economy, and ease of operation. It responds to boat maneuvers with precision and delivers a better overall driving experience. No knowledge of trimming an engine is needed to take advantage of Active Trim.*

- As the boat accelerates, the engine will trim out.
- As the boat decelerates, e.g. making a turn, the engine will trim in.
- Active Trim can be overridden at anytime by using the regular manual trim buttons.
- Active Trim allows the boat operator to compensate for changes in boat load, driver preferences, and weather conditions while maintaining full automatic control.

P/N 90-8M011820 JANUARY 2016

© 2016 MERCURY MARINE. All rights reserved. Reproduction in whole or in part without permission is prohibited.



### **On/Resume**

Press the On/Resume button to turn Active Trim on. On/Resume also allows the boat operator to resume automatic control mode when in manual operation.



### **Off**

Turns off Active Trim for operators who want full manual control. No automatic trim features are available when Active Trim is off.



### **Trim Profile Indicator**

Indicates currently selected trim profile. Higher number will provide more trim at a given speed.



### **Trim Profile Adjust**

Lets the boat operator adjust the Active Trim profile to account for changes in load, water conditions, etc.



### **System Status Light**

Alerts the boat operator to the status of the Active Trim system:



- **AMBER SOLID** – system working normally.
- **AMBER FLASHING** – user override, system not actively controlling. (Press On/Resume to resume Active Trim control.)
- **RED FLASHING** – No GPS signal, system not actively controlling. Operate the trim manually until signal is established. System will recover on its own.
- **RED DOUBLE FLASHING** – system fault, system not actively controlling.



# How it works

The Active Trim system has four modes of operation. At boat startup, Active Trim resumes on/off state from the previous shut down. For example, if Active Trim was on at previous shut down, it will be on at next start-up.



## 1. Idle Speeds

Maintains the existing trim position.



## 2. Acceleration (hole shot)

Tucks the engine under to minimize bow rise and improve time-to-plane.



## 3. Planing Speeds

Progressively trims the engine based on GPS speed to maintain the most efficient running attitude.



## 4. Override

When the boat operator uses manual trim, the Active Trim system is immediately overridden, returning full control to the operator.

Refer to your owner's manual for more detailed instructions.



# What you need to know

## Resume functionality

If the boat operator overrides Active Trim system at planing speeds using the trim button or exceeds 50 mph (80 kph), the system will stop controlling. Active Trim will resume automatically under the following conditions:

- Override occurred above 50 mph (80 kph) and the boat operator then decelerates below 50 mph (80 kph).
- Override occurred above 80% of rated engine RPM and the boat operator then decelerates below 80% of rated engine RPM.
- Override occurred in cruising speed range and then the boat operator decelerates to idle. Active Trim will become active on the next acceleration.

## Shallow water operation

**Active Trim cannot detect water depth and will not trim up automatically in shallow water. The boat operator will need to override Active Trim by trimming the engine manually or pressing the OFF button.**

- If the boat operator trims above 50% trim position, the system will remain in the standby / manual state and will not trim the engine down automatically.
- Automatic control can be resumed by pressing On/Resume button.

## Built-in GPS

This device includes a built-in GPS antenna used to determine vessel speed. The GPS has three start-up modes:

- **COLD START** - If vessel battery power was turned off (using battery switch), GPS will take between 30-60 seconds to acquire a signal.
- **WARM START** - If vessel battery power has been maintained since last shutdown, GPS will acquire a signal in approximately 30 seconds.
- **HOT START** - If vessel has been keyed off for less than eight hours, the GPS will acquire a signal in less than 10 seconds.

Active Trim system will not automatically control trim until GPS has acquired a signal.

System Status LED flashing red light may indicate no GPS signal has been acquired.