



#### PART NO. MAYFAIR PERFORMANCE 137-8580

TITI F: ELECTRONIC HEADS UP INDICATOR INSTALLATION

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THRU DASH 1,2,3 & STICKS INSTALLATION INSTRUCTONS:

1) AFTER THE DASH HAS BEEN CUTOUT AND DRILLED.

2) THIS COMES PREASSEMBLED. REMOVE #1 CARBON COVER PLATE, #2 BOLTS, #3 STICKS GUIDE AND #4 BE7EL.

3) USE THE #5 WOOD SCREWS TO ATTACHED #4 BEZEL TO THE DASH.

4) THE MAIN ASSEMBLY HAS TO BE INSTALLED FROM UNDER THE DASH.

5) USING 1/8 HEX BIT SOCKET TO INSTALL #2 BOLTS INTO THE MAIN ASSEMBLY, SNUG FOR NOW.

6) SLIDE #3 GUIDE OVER THE STICKS AND INTO THE CUTOUT IN THE BEZEL. 7) NOW, TORQUE #4 BOLTS TO 80 IN. LBS..

8) APPLY ANTI-SIEZE TO THE COVER STUDS. SLIDE #1 CARBON COVER OVER THE STICKS. 9) INSTALL #6 WASHER AND #8 NUTS. USE A 11/32 SOCKET TO TORQUE TO 20 IN. LBS.. 10) LOOK AT DETAIL A. MAKE SURE THE TOP LINE IS EVEN WITH THE CARBON COVER. IF NOT, USING 1/4 ALLEN KEY AND LOSING THE 3 BOLTS, #8, TO SLIDE THE ASSEMBLY INTO PROPER HEIGHT.





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# MAYFAIR PERFORMANCE Digital Heads Up

### **Installation & Operating Instructions**

#### **Mounting Instructions**

The controller should be mounted in a protected area near the indicator. The heads-up assembly should be **handled with care** to not damage or alter the alignment of the lead screws and motors. A light machine oil can be used on the lead screws if required. Once installed, make sure that there aren't any wires or cables that could interfere with the rotation of the couplers or lead screws.

#### **Ignition Connection**

The yellow wire should be connected to the ignition switch(s). Turning off the ignition will retract the indicators.

#### Calibration

A calibration must be performed before the indicator sticks will operate. The calibration involves recording the full down and full up readings from the senders.

#### **Calibrating Full Down Positions**

- 1. Move the engines / drive(s) / tabs to their full down positions. Once they are all down the LED should be flashing green.
- 2. If the LED is flashing red, the output from one, or more of the senders is not valid. One quick red LED flash is a port error, two quick flashes is starboard. The calibration can be completed but the indicator stick for the sender with the error will not operate until the issue is resolved, and another calibration is performed.
- 3. Press the LEARN button and the LED will turn red. Continue to hold the LEARN button until the LED starts rapidly flashing green and then release the button. You have now successfully recorded the full down values.

#### **Calibrating Full Up Positions**

- 4. After ten seconds the green flashing LED will start flashing red because the engines / tabs are full down and we now need to record the full up positions.
- 5. Move the engines to their full up positions and the LED will change back to slowly flashing green indicating the range is acceptable.
- 6. Press and hold the LEARN button until the LED turns red and continue to hold until the LED changes to solid green, indicating a successful calibration.

#### **Forcing a Recalibration**

Once the calibration is complete it will not need to be repeated unless the boat experiences a mechanical or electrical issue that impacts the trim system. In the event of a such a repair (i.e. removing/replacing a trim sender) then the operator can force a calibration using the following procedure.

- 1. Turn off the battery or pull the fuse for the Digital Heads Up.
- 2. Push and hold the LEARN and then restoring power.
- 3. Continue holding the LEARN button until the red LED turns on.
- 4. Refer to the CALIBRATION section of these instructions to perform a calibration.

### **Operation**

Following a short delay after the battery power is switched on the indicators will fully retract to their "home" position. During this process you may hear a hum coming from the stepper motors, this is normal and will only last a few seconds. As each indicator reaches home it will bounce up and down a few times.

After a brief delay the indicators will fully retract when the ignition is turned off. Once the ignition is turned back on the indicators will automatically move to the correct positions. NOTE: Do not try to adjust the indicators by turning the senders. If they are not moving correctly then a re-calibration is required.

Pushing the Learn button after the system is calibrated will send the indicators fully down to re-establish home and then they will resume normal operation.

Once calibrated, A re-home will be required if something interferes with the movement of an indicator stick, or the rotation of a lead screw. A re-home can be accomplished by a power cycle, switching off the ignition, or pressing the learn button.

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#### **Mounting Instructions**

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#### Wiring

The red and black power wires should be connected to a circuit that can be turned off / on with the battery switch(s). The yellow wire should be connected to an ignition switch. Turning off the ignition will retract the indicators.

#### **Calibration**

The calibration needs to be performed before the indicator will operate. Move the engines / drive(s) / tabs to their full down positions. Confirm that the LED(s) are slowly flashing green. A purple LED i not, the output from one, or more of the senders is not valid and will need to be corrected. One quick red LED flash is a port error, two quick flashes is starboard.

- 1. Turn on the battery power.
- 2. If the boat has Mercury engines with SmartCraft then it will be necessary to turn on the ignitions to power the senders.
- 3. When the power is turned on there will be a short pause and then the indicators will each move to "home", which is full down and then bounce up a little three times to make sure they have reached home. It is normal to hear some noise from the stepper motors during this process.
- 4. Move the engines / tabs / jack plates full down.
- 5. The LEDs should all be flashing green. A purple LED indicates zero volts from the sender. The calibration can continue but that "stick" will be disabled until the issue is resolved.
- 6. While the LED(s) are slowly flashing green, press and hold the LEARN button until the LED(s) turn off and then resume flashing again.
- 7. LED(s) that were green in the previous step will now be flashing purple to indicate they are out of range because the engines / tabs/ jack plates are still full down. LED(s) that were red will remain red for the red and inoperative until the sender issue is resolved.
- 8. Move the engines / tabs / jack plates full up. As they are moving the purple LED(s) will start flashing green indicating they are now within and acceptable range.
- 9. Once the LED(s) are flashing green, press and hold the LEARN button until the LED(s) turn off and then flash for a few seconds. Once they stop flashing the calibration is complete.

#### **Forcing a Recalibration**

Once the calibration is complete it will not need to be repeated unless the boat experiences a mechanical or electrical issue that impacts the trim system. In the event of a such a repair (i.e. removing/replacing a trim sender) then the operator can force a calibration using the following procedure.

- 1. Turn off the battery or pull the fuse for the Digital Heads Up.
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- 3. Continue holding the LEARN button until the red LED(s) turn on.

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