The Dash Panel when activated with 12 volts, will cycle through all of the LED lights for 2 cycles. After the 2 cycles are complete, the LED light will be illuminated at the location of the trim of the tabs or the drives.

If the light flashes on either side of the dash panel and is not a solid color, this means that it does not have a signal from the sending unit. If the lights are solid, it has the signal, and will move up or down when the trim or the tabs location is changed.

TRIM TABS

part numbers 137-8402, 8403 & 8404
*Red Wires connect to switched 12 Volt 5 amp fuses
*Black Wires connect to Ground
*White Wires are signal out and signal in, and connect to each other
*Yellow Wires connect to dash light switches.
The LED light on panel will dim when connected to 12 Volts.

*NOTE: 18 GA Wire for harness
This is a voltage regulator designed to take a single 12 volt input and turn it into two 5 volt outputs to operate 5 volt sensors, such as the Mercury Smartcraft sensors on both the K-plane trim tabs and Bravo outdrives.

The pair of red and black wires are for the input of 12 volts and ground, with the red wire being for 12 volts and the black for ground input. The pair of black and white wires are for 5 volts out to the sensor and ground out to the sensor. It does not matter which set of black and white wires goes to port or starboard as long as they are connected to the sensor. If you are operating just one sensor then you can use either set of black/wires for the single sensor function.
BRAVO SMARTCRAFT SENSORS

TRIM PANEL

SWITCHED 12V TO DASH LIGHT SWITCH

VOLTAGE REGULATOR

MERC TRIM SENDER

WHITE

WHITE

WHITE

WHITE

RED

WHITE

BLUE

BLACK

BLACK

BLUE
K-PLANE TRIM TABS SMARTCRAFT

TRIM PANEL

- WHITE
- RED
- SWITCHED 12V
- TO DASH LIGHT SWITCH

- GREEN

- MERC TRIM SENDER
  - PURPLE
  - WHITE
  - BLACK

- VOLTAGE REGULATOR
  - BLACK

- MERC TRIM SENDER
  - WHITE
  - PURPLE
  - BLACK

SWITCHED 12V
TWIN TABS
TWIN DRIVES
137-8411-4
SINGLE BRAVO
AND TRIM TABS
137-8411-3
SINGLE BRAVO TRIM TAB
SMARTCRAFT
137-8411-7
TWIN BRAVOS OR K-PLANES
SMART CART ONLY

Fuse

Switched
12 Volts

Port
12V
Dash Lights
Ground
Starboard
MAYFAIR HYDRAULICS

PART NO.
137-8402

TITLE:
2 LED TRIM/DRIVE PANEL

www.mayfairhydraulics.com

4x10-24 MOUNTING STUDS

WIRE THAT CONNECT TO EACH TRIM/DRIVE SENSOR.

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MAYFAIR HYDRAULICS
PART NO. 137-8404

TITLE: 6 LED TRIM/DRIVE PANEL

www.mayfairhydraulics.com

410-24 MOUNTING STUDS

WIRES THAT CONNECT TO EACH TRIM/DRIVE SENSOR

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MERCURY SMARTCRAFT
USES THE TOP SIDE SLOT.

INSTALLATION INSTRUCTIONS:
1) FIG. A IS THE OUTSIDE SIZE OF THE LED DASH PANEL.

2) CUT PANEL TEMPLATE OUT AND TAPE TO THE DASH.

3) USING THE 4 CENTER MARKS FOR FIG. B. DRILL 4x \( \frac{13}{64} \) HOLES.

4) DETERMINE WHICH SIDE SLOT DO YOU NEED TO USE; USING THE 2 CENTER MARKS FOR FIG. C. DRILL 2x \( \frac{3}{8} \) HOLES.

5) USE THE JIGSAW TO CUT OUT THE DASH IN BETWEEN THE \( \frac{3}{8} \) HOLES. THESE SLOTS WILL ALLOW THE LED PANEL WIRES TO STICK THRU THE DASH.
INSTALLATION INSTRUCTIONS:
1) FIG. A IS THE OUTSIDE SIZE OF THE LED DASH PANEL.
2) CUT PANEL TEMPLATE OUT AND TAPE TO THE DASH.
3) USING THE 4 CENTER MARKS FOR FIG. B. DRILL 4x $\frac{13}{64}$ HOLES.
4) DETERMINE WHICH SIDE SLOT DO YOU NEED TO USE. USING THE 2 CENTER MARKS FOR FIG. C. DRILL 2x $\frac{3}{8}$ HOLES.
5) USE THE JIGSAW TO CUT OUT THE DASH IN BETWEEN THE $\frac{3}{8}$ HOLES. THESE SLOTS WILL ALLOW THE LED PANEL WIRES TO STICK THRU THE DASH.

MERCURY SMARTCRAFT USES THE TOP SIDE SLOT.

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INSTALLATION INSTRUCTIONS:
1) FIG. A IS THE OUTSIDE SIZE OF THE LED DASH PANEL.

2) CUT PANEL TEMPLATE OUT AND TAPE TO THE DASH.

3) USING THE 4 CENTER MARKS FOR FIG. B, DRILL 4x $\frac{13}{64}$ HOLES.

4) DETERMINE WHICH SIDE SLOT DO YOU NEED TO USE. USING THE 2 CENTER MARKS FOR FIG. C, DRILL 2x $\frac{3}{8}$ HOLES.

5) USE THE JIGSAW TO CUT OUT THE DASH IN BETWEEN THE $\frac{3}{8}$ HOLES. THESE SLOTS WILL ALLOW THE LED PANEL WIRES TO STICK THRU THE DASH.
INSTALLATION INSTRUCTIONS:
1) REMOVE THE STOCK CABLE.
2) USING THE 2 STOCK STUDS ON TRANSOM ASSEMBLY, MOUNT BRACKET, FIG. A. USE THE PROVIDED NUTS AND WASHER, FIG. B.
3) USE THE PROVIDED #10 x 5/8 BOLTS, WASHER AND NUTS TO ATTACH BRACKET, FIG C, TO THE STOCK CABLE BRACKET.
4) APPLY LOCTITE TO THE #10 BOLT, FIG. D AND TIGHTEN TO 30 IN. LBS.
5) SCREW WIRE FITTING, FIG. E, INTO THE EXISTING CABLE THRU HULL.
6) HARDIN WILL MAKE, FIG F HOSE TO LENGHT. MEASURE THE DISTANCE BETWEEN SENDER, FIG G AND FITTING, FIG. E. SLIDE WIRES THRU THE CABLE THRU HULL AND ATTACH HOSE, FIG. F.
7) USE 137-8411I INSTRUCTIONS FOR FINAL WIRING INSTRUCTIONS.
While the circuit boards and the internal components are somewhat complex with this system, how it functions is not. The way it should operate when hooked up correctly is that when the ignition key is turned to the on position the dash panel should start its protocol. This start up protocol runs the dash panel through 2 cycles of all of the LED lights and will stop at the position of the trim sensor input. The lights should be solid and showing the trim position of the sensor when everything is correct. If after the start up protocol a indicator light or lights is flashing this means it is not receiving a signal from the sensor.

If one or more of the LED lights is flashing the first thing to check is that sensor at the transom is getting 12 volts to the red wire and that black wire has a good ground. If the sensor has power and ground then check the white wire to make sure it is sending out a voltage signal when the system has the key on. The white wires voltage signal will be between .39 volts and 4.59 depending on the magnet position on the drive or tab. The sensor has 9 small sensors potted in the housing which putout 17 voltage signals to be read by the dash panel. Each of the 17 LED lights on the indicator match one of these voltage outputs. The voltage change per light is app. 25 volts.

Voltage to be checked with a volt meter set to read voltage. The black probe to the ground and the red probe to check the red or white wires for voltage.

(These voltage numbers can vary a little as they work in a voltage range)

The first blue light is .39 volts
The middle green light is 2.50 volts
The first red light is 4.59 volts

If the white wire has no voltage output and has 12 volts to the red wire and a good ground it is a sensor issue. The sensor will need to be replaced as it is not a servicable component. If the white wire has the correct voltage output signal between .39 and 4.59 volts then look for a bad connection between the sensor and the dash panel. If the connection is good and the correct voltage signal is going into the dash panel it is a dash panel issue. The dash panel is also not a servicable component and would need to be changed.

If the dash panel lights are just solid and do not move this is normally a low voltage issue and there is less than 7 volts available. If the dash panel restarts the start up protocol when the drive or tabs are moved can be two issues: This can also be a low voltage problem or the dash panel is mounted to close to the trim pumps.