Pilot™ I

Owner’s Manual

Pilot I Displays,
- Speedometer in MPH and Knots
- Trip Log
- Clock
- Voltmeter
- Air & Surface Temp.
- Digital Depth Sounder with Deep and Shallow water alarms,
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- Audible and Visual Alarms
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Faria Pilot I Description

The Faria Pilot I system is a multifunctional instrument designed to give two simultaneous readouts of several different and independent functions on an upper and lower LCD display. A digital Bar Graph provides continuous display of the battery system voltage. The illustration above shows the various functions provided by the instrument.

Warning: The Depth Sounder is not to be used for navigation or as a device to avoid grounding which may result in boat damage or personal injury. Always use caution operating in shallow areas and maintain a very slow speed. Be aware that depth may change to quickly for you to avoid grounding.
Installation:

**CAUTION:** Disconnect the battery during installation. Tighten nuts on the backclump only slightly more than you can tighten with your fingers. *Six inch-pounds* of torque are sufficient. Over-tightening could result in damage to the instrument and may void your warranty.

1. Cut a 3-3/8” diameter hole in the dash and mount the gauge with the backclump supplied.

Follow the enclosed Airmar Technology Corporation instructions for installing the multifunction Triducer. Once the Triducer is installed and you have lead the cables to the Pilot, connect the wires from the Triducer to the corresponding 4 or 6-pin connectors as illustrated using the butt connectors supplied. The butt connectors have a heat activated waterproofing. Once the butt connections have been crimped slowly apply heat with a heat gun until you see sealant coming out of the connector ends. It is recommended to wrap the connections together with electrical tape for further protection.

2. Follow the wiring diagram at the end of this manual for wiring connections. For connections for a Yamaha motor use the connections on HN0362.

For all other engine configurations use the Others connections on HN0365.

Find both drawings in the back of this manual.

3. Follow the wiring diagram at the end of this manual for wiring connections. For connections for a Yamaha motor use the connections on HN0362.

For all other engine configurations use the Others connections on HN0365.

NOTE: If the transducer cables are not connected properly or not plugged into the Pilot, the display will blink when the power is applied to the unit.

Find both drawings in the back of this manual.
Operation:

Power ON:
The Pilot I instrument will turn on when the ignition key switch is set to the run position. When the ignition key switch is turned to the off position, the Pilot I will turn off.

*If the mode button is accidentally pressed for an extended period of time the unit will enter a diagnostic OFF Mode. This can be remedied by pressing the “Mode” button again to turn the unit on.

Illumination On / Up:
To turn on or increase the dial illumination, press the right “Up” arrow with the Pilot in the Normal Mode.

Illumination Off / Down:
To turn off or decrease the dial illumination, press the left “Down” arrow with the Pilot in the Normal Mode.

Normal Mode:
Pilot is operating showing the last selected Functions. 
NOTE: When in either the Select or Edit Modes if no button is pushed for 5 seconds the Pilot will revert to the Normal Mode functions last used or to the new settings.

Select Mode:
The Select Mode allows selection of the upper or lower LCD displays and or the particular function desired in either display.

Activating the Select Mode:
To activate the Select Mode, press the “MODE” button quickly.

The Pilot will beep and the last selected active display (upper or lower) will flash.
Selecting upper or lower active display:
Activate the Select Mode and while the display is flashing, press the “Up” arrow to select the upper display as active or the “Down” arrow to select the lower display as the active display.

Selecting display function, (moving the Function Indicator):
When in the Select Mode in the desired active display and while the display is flashing press the “MODE” button quickly again. The Function Indicator will move from function to function around the selected active display and the Pilot will beep each time the “MODE” button is pressed.

Stop at the desired function.

Edit Mode:
The Edit Mode allows you to set the following:
Depth Sounder: shallow alarm, deep alarm, keel offset, scale units (feet, fathoms or meters).
Timer: reset to zero.
Clock: hours and minutes.
Distance Log: reset to zero, speed scale units (miles per hour or knots,) calibrate speed and distance (statute miles or nautical miles).
Thermometers air and water: scale units (Fahrenheit or Centigrade).

Selecting the Edit Mode:
When the desired display function is selected, press and hold the “MODE” button until the Pilot beeps. The Edit Mode will activate.
If no buttons are pushed within 5 seconds, the Pilot will revert automatically to the Normal Mode.

You can also enter the Edit Mode while in the Select Mode. The Pilot display will then stop flashing (Select Mode) indicating the change to the Edit Mode. (The operation of various edit modes will be separately explained for each function throughout the manual.

Upper Display Functions

Depth Sounder:

Description:
Depending on the bottom conditions the depth finder will read to 300 feet or the corresponding number of meters or fathoms to the nearest 1/10th (0.1).

NOTE: A 600 ft. Triducer is also available.

The depth finder has an audible and LCD displayed depth alarm with adjustable shallow and deep limits and a depth below keel offset feature. These settings once made are stored in memory and will remain even if the battery is disconnected.

Operation:

Selecting the Depth Sounder Function:
Press the “MODE” button and activate the Select Mode.

Press the “Up” arrow to select the upper display.

Continue pressing the “MODE” button again until the Function Indicator is pointing to FT, M or FA. (The Function Indicator will automatically point to the last unit type selected. You are now in the Depth Finder function.)

Selecting the Depth Sounder Units.
Press and hold the “MODE” button until the Pilot beeps to select the Edit Mode. Continue pressing the “MODE” button quickly until the upper display reads “Un” (units).

Press the “Up” or “Down” arrow button to move the function indicator to the desired units either Feet (F), Meters (M) or Fathoms (FA).

Depth alarms:
When the shallow depth setting is read by the depth sounder, the Function Indicator
will flash on the LCD next to the “S” and the audible alarm will sound rapidly. When the deep depth setting is read by the depth sounder, the Function Indicator will flash on the LCD next to the “D” and the audible alarm will sound at 2 beeps per second.

**NOTE:** Once a keel offset is programmed, the depth below the keel will activate the shallow and deep alarms.

**NOTE:** To fully deactivate an alarm, reset it to zero.

**Setting the Shallow Alarm:**
Press and hold the “MODE” button until the Pilot beeps to select the *Edit Mode*. Continue pressing the “MODE” button quickly until the Function Indicator points to the “S” indicating the shallow depth alarm setting. This is the shallowest water that will activate the alarm.

Press and hold the “Up” or “Down” arrow keypads to adjust the reading to the desired depth.

**Setting the Deep Alarm:**
Press and hold the “MODE” button until the Pilot beeps to select the *Edit Mode*.

Continue pressing the “MODE” button quickly until the Function Indicator points to the “D” indicating the deep depth alarm setting.

This is the deepest water that will activate the alarm. Press and hold the “Up” or “Down” arrow keypads to adjust the reading to the desired depth.

**Setting the Keel Offset:**
Keel Offset can be set so that the depth sounder either shows the depth below the keel, (set the offset to be the depth between the transducer and the bottom of the keel) or the depth below the transducer (set the offset to 0).

For example, if the bottom of the keel is 2 ft. below the transducer and you want the depth sounder to read the depth below the keel, the display should be adjusted to read minus -2.0.
Press and hold the “MODE” button until the Pilot beeps to select the **Edit Mode**.

Continue pressing the “MODE” button quickly until the Function Indicator points to the “KL” indicating the keel offset function.

Press and hold only the “Down” arrow key pad to adjust the reading to the desired depth. A minus sign (-) will appear to the left of the setting.

**Loss of Signal (SIG):**
If the signal is lost due to depths below 300 feet, depths above 2 feet or a disconnected or broken cable, the characters (SIG) will appear in the upper display signifying loss of signal. (It will look like 516)

If the upper display depth sounder function is active the (SIG) will illuminate and hold. If any other upper display function is active the (SIG) will flash on and off alternately with the active function’s readout.

**Timer:**

**Description:**
The timer operates simultaneously in hours, minutes and seconds. The timer is viewed in the **Normal Mode** as either hours and minutes the left hand (T1), or minutes and seconds the right hand (T1).

**Operation:**

**Selecting the Timer Functions.**
Press the “MODE” button and activate the **Select Mode**.

Press the “Up” arrow to Select the upper display.
Continue pressing the “MODE” button again until the Function Indicator is pointing to either the left (T1) or the right (T1).

Starting and Stopping the Timer.
Press either “Up” or “Down” arrow button to start or stop the timer at any time.

Resetting the Timer.
Press and hold the “MODE” button until the Pilot beeps to select the Edit Mode. Selecting the Edit Mode in either (T1) or (T1) will reset the timer to zero.

Clock:
Description:
The clock will run continuously as long as power is applied to the Pilot. The clock reads hours and minutes.

Operation:
Selecting the Clock Function.
Press the “MODE” button and activate the Select Mode.

Press the “Up” arrow to select the upper display.

Continue pressing the “MODE” button again until the Function Indicator is pointing to the clock.
Setting the clock:
Press and hold the “MODE” button until the Pilot beeps to select the Edit Mode. Press the “Up” or “Down” arrow keypads once to set each minute.

**Minutes:**

Quick Press

Press and hold the “Up” or “Down” arrow keypads to set the hours. (The minutes will continuously advance in 10-minute intervals to change the hours.)

**Hours:**

Press and hold

Lower Display Functions

**Speedometer**

**Description:**
The Speedometer gives digital readings in either Statue Miles per Hour or Nautical Miles per Hour (knots). Readings are accurate up to 58 MPH (50KTS) in 0.1 increments. Speed calibration can be performed at any speed by setting the speedometer reading to match GPS, radar gun, time distance run etc. The Distance Log reads in either Statue Miles or Nautical Miles in 0.1 increments depending upon which unit type is selected for the Speedometer or Log. (Setting units in either function sets the units for both). Distance Log calibration can also be performed by setting the Log reading to match a GPS or charted distance run. Calibrating the distance Log also automatically calibrates the Speedometer. (The longer the distance the more accurate the calibration.)

**Operation:**

**Selecting the Speedometer Function:**
Press the “MODE” button and activate the Select Mode.

Press the “Down” arrow to select the lower display.

Continue pressing the “MODE” button again until the Function Indicator is pointing to either MPH or KTS.

(The Function Indicator will automatically point to the last unit type selected. You are now in the Speedometer function.)
Selecting the Speedometer Units.
Press and hold the “MODE” button until the Pilot beeps to select the Edit Mode.

![MODE](image)

Continue pressing the “MODE” button quickly until the lower display reads “Un” (units).

![Un](image)

Press either the “Up or Down”: arrow button to move the function indicator to the desired units either Miles per Hour (MPH), or Knots (KTS).

Distance Log
Selecting the Distance Log Function: Press the “MODE” button and activate the Select Mode.

![MODE](image)

Press the “Down” arrow to select the lower display.

Calibrating the Speedometer:
Press and hold the “MODE” button until the Pilot beeps to select the Edit Mode. Continue pressing the “MODE” button quickly until the lower display reads “C” (calibration). Press either the “Up” or “Down” arrow button to change the speed reading to the desired speed.
Continue pressing the “MODE” button again until the Function Indicator is pointing to DIS. (The Function Indicator will also automatically point to the last unit type selected. You are now in the Distance Log Function)

**Selecting the Distance Log Units.**
Press and hold the “MODE” button until the Pilot beeps to select the **Edit Mode**.

Continue pressing the “MODE” button quickly until the lower display reads “Un” (units).

Press the “Up” or “Down” arrow button to move the function indicator to the desired units either Miles (MPH), or Nautical Miles (KTS).

**Calibrating the Distance Log:**
Press and hold the “MODE” button until the Pilot beeps to select the **Edit Mode**.

Continue pressing the “MODE” button quickly until the lower display reads “c” (calibration).

Press either the “Up” or “Down” arrow button to change the Log reading to the desired distance.

**Clearing the Distance Log:**
Press and hold the “MODE” button until the Pilot beeps to select the **Edit Mode**. Continue pressing the “MODE” button quickly until the lower display reads “CLR” (clear).
Press either the “Up” or “Down” arrow button to clear the Log reading to zero.

**Water & Air / Bait-well Temperature**

**Description:**
The Pilot I will monitor water surface temperature. The (Setting units Fahrenheit (F), or Centigrade (C), in either function sets the units for both). (A second temperature, either air or bait-well may be monitored when the unit is equipped with the optional sender.)

**Operation:**

**Selecting the Air / Water Temperature Function**
Press the “MODE” button and activate the Select Mode.

Press the “Down” arrow to Select the lower display.

Continue pressing the “MODE” button again until the Function Indicator is pointing to either the upper icon (Air/Bait-well Temp.) or the lower icon (Water Temp.)

**Selecting the Air / Water Temperature Units**
Press and hold the “MODE” button until the Pilot beeps to select **Edit Mode**.

Continue pressing the “MODE” button quickly until the lower display reads “Un” (units).

Press either the “Up” or “Down” arrow button to move the Function Indicator to the desired units either Fahrenheit (F) or Centigrade (C)
Voltmeter:

Description:
The Voltmeter continuously monitors the battery system voltage supplied to the Pilot I. The Voltmeter has a user adjustable low and high voltage alarm feature. If the 12 vDC power drops to below the user adjustable low voltage setting or rises above the user adjustable high voltage setting, the voltage alarm activates. The lower display will change to the Voltmeter Function. The LCD will flash while displaying the current voltage and the Pilot I will beep every 15 seconds to warn of a low or high voltage condition. The default settings for the alarms are 12 vDC (low voltage) and 16 vDC (high voltage). Please check your owner’s manual and battery instructions for further information for these settings.

Selecting the Voltmeter Function:
Press the “MODE“ button and activate the Select Mode.

Press the “Down” arrow to select the lower display.

Continue pressing the “MODE” button again until the display shows 00.0 and no other Lower Display Function Indicator is active except the one pointing to the Battery icon.

Setting the Voltage Alarms
Press and hold the “MODE” button until the Pilot I beeps to indicate Edit Mode is selected.

The upper display indicates “bAtL” and the lower display shows the current low voltage setting.

Press either the “Up” or “Down” arrow button to adjust the low voltage alarm setting.
Press the “MODE” button.

The upper display changes to “bAtH” and the lower display shows the current high voltage warning setting.

Press either the “Up” or “Down” arrow button to adjust the high voltage alarm setting.

Bar Graph Display

**Bar Graph Display Function**

**Description:**
The bar graph provides a continuous display of the battery system voltage supplied to Pilot I. Each element of the bar graph represents one (1) volt. Voltages from 10.5 vDC to 17.5 vDC are displayed. Five elements active, 13.5 - 14.5 vDC, is usually considered normal for a properly operating system with the engine running.

Please check your owners manual and battery instructions for further information concerning “normal” voltage readings for your installation.
Harness HN0362
4 - pin connector
Yamaha adaptor

4- pin connector (CN0082)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Red</td>
<td>+12 Battery</td>
</tr>
<tr>
<td>B</td>
<td>Purple</td>
<td>+12 Ignition</td>
</tr>
<tr>
<td>C</td>
<td>Black</td>
<td>Ground</td>
</tr>
<tr>
<td>D</td>
<td>Blue</td>
<td>Depth Sounder signal</td>
</tr>
</tbody>
</table>

Shrink Tubing or Wrap

Red (+12 vDC) Yellow (Ignition) Black (Grnd)

Multi-bullets to Yamaha Engine Harness

To Pilot I

Green
White
Brown

Paddle Wheel triducer

ECR 2065 2/12/02
Harness HN0362
6-pin connector
Yamaha adaptor

To Pilot I

2x PJ0005
Shrink Tubing or Wrap

6-pin connector (CN0083)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Plug</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Plug</td>
<td>Not used</td>
</tr>
<tr>
<td>B</td>
<td>Plug</td>
<td>Not used</td>
</tr>
<tr>
<td>C</td>
<td>Green</td>
<td>Sensor Ground</td>
</tr>
<tr>
<td>D</td>
<td>White</td>
<td>Water Temperature</td>
</tr>
<tr>
<td>E</td>
<td>Red</td>
<td>Air Temperature</td>
</tr>
<tr>
<td>F</td>
<td>White/Blue</td>
<td>Speedo Sensor</td>
</tr>
</tbody>
</table>

(Paddle Wheel Signal)
(Water Temp. Sensor signal)
(Wt Temp Grnd)

ECR 2065 2/12/02
Harness HN0365
4 - pin connector

4-pin connector (CN0082)

<table>
<thead>
<tr>
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<th>Function</th>
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<tbody>
<tr>
<td>A</td>
<td>Red</td>
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<td>B</td>
<td>Purple</td>
<td>+12 Ignition</td>
</tr>
<tr>
<td>C</td>
<td>Black</td>
<td>Depth Sounder (-)</td>
</tr>
<tr>
<td>D</td>
<td>Blue</td>
<td>Depth Sounder signal</td>
</tr>
</tbody>
</table>

To Pilot I

Shrink Tubing or Wrap

Red
Purple
Black

(+12 vDC) (Ignition) (Grnd)

Blue (Depth Sounder Signal)
Black (Depth Sounder (-))

Red (+12 vDC)
Shield

Paddle Wheel triducer

Green
White
Brown
Harness HN0365
6-pin connector

<table>
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<td>Plug</td>
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<td>C</td>
<td>Black</td>
<td>Sensor Ground</td>
</tr>
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<td>D</td>
<td>Tan/White</td>
<td>Water Temperature</td>
</tr>
<tr>
<td>E</td>
<td>Tan/Blue</td>
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</tr>
<tr>
<td>F</td>
<td>White/Blue</td>
<td>Speedo Sensor</td>
</tr>
</tbody>
</table>

2x PJ0005

Shrink Tubing or Wrap

Air Temp. Sensor

(Wt Temp Grnd)

(Water Temp. Sensor signal)

(Paddle Wheel Signal)