The table below shows a matrix of the LED combination with a probable corrective action.

<table>
<thead>
<tr>
<th>External Fault</th>
<th>Computer OK</th>
<th>Computer Fail</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>GREEN</td>
<td>OFF</td>
<td>Normal operation.</td>
</tr>
<tr>
<td>YELLOW</td>
<td>GREEN</td>
<td>OFF</td>
<td>Troubleshoot External Faults using the Level 2 Self-Test. DO NOT REMOVE OR REPLACE THE EGPWS.</td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>Ensure that the EGPWS is installed in the rack correctly and power to the EGPWS is applied.</td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>RED</td>
<td>Perform Level 2 Self-Test and Bench Test*. Remove EGPWS if required.</td>
</tr>
<tr>
<td>YELLOW</td>
<td>OFF</td>
<td>RED</td>
<td>Invalid state; perform Level 2 Self-Test if possible. Remove EGPWS if required.</td>
</tr>
<tr>
<td>YELLOW</td>
<td>GREEN</td>
<td>RED</td>
<td>Invalid state; perform Level 2 Self-Test if possible. Remove EGPWS if required.</td>
</tr>
</tbody>
</table>

Note: Some installations may be certified with the Yellow External Fault LED illuminated.

If a cockpit INOP light or a pre-flight Level 1 Self-Test identifies a portion of EGPWS functionality as INOP:

1. Check the LEDs on the front panel of the EGPWS.
2. Run a Level 2 Self-Test.

The EGPWS has three diagnostic LEDs on the front panel:
- **Yellow**: External Fault
- **Green**: Computer OK
- **Red**: Computer Fail

**DO NOT REMOVE OR REPLACE THE EGPWS BEFORE EXECUTING A LEVEL 2 SELF-TEST**

*Useful Tip #1*: The red Computer Fail LED illuminated does not guarantee the EGPWS is failed. It is possible for invalid strapping (MK V/VII EGPWS only) to cause the LED to illuminate. Before returning a MK V/VII for repair, bench test the unit with power-ground applied, making sure to ground the parity pin if the red Computer Fail LED does not illuminate during this bench test, the aircraft wiring is causing the Computer Fail condition.

**SELF-TEST**

The EGPWS generates 6 levels of Self-Test. This Troubleshooting guide will only cover Level 1, Level 2, and Level 6.

Level 1: Go/No-Go Status (typically performed by pilot before flight)
- Level 2: Current Faults (faults existing at the time test was started)
- Level 3: System Configuration (hardware/software/database/configuration)
- Level 4: In-Flight Fault History (last 10 flight legs with faults)
- Level 5: In-Flight Warning History (last 10 flight legs with warnings)
- Level 6: Discrete Input Test (real-time switch tester)

(Level 1) Press the GPWS test switch for less than 2 seconds.
(Level 2) Press the GPWS test switch for more than 2 seconds will activate the Long Level 1 Self-Test (Go/No Go + all configured voices).
(Level 2) Once the Level 1 Self-Test audio begins press the GPWS test switch for less than 2 seconds.
(Level 3) When “PRESS TO CONTINUE” message is enunciated at the end of Level 2 Self-Test, press the GPWS test switch for < 2 seconds.
(Level 4) When “PRESS TO CONTINUE” message is enunciated at the end of Level 3 Self-Test, press the GPWS test switch for < 2 seconds.
(Level 5) When “PRESS TO CONTINUE” message is enunciated at the end of Level 4 Self-Test, press the GPWS test switch for < 2 seconds.
(Level 6) When “PRESS TO CONTINUE” message is enunciated at the end of Level 5 Self-Test, press the GPWS test switch for < 2 seconds.

Useful Tip #2: - Pressing the GPWS test switch for more than 2 seconds during Level 2 though 5 will bypass the test information and jump immediately to the end of that level (“PRESS TO CONTINUE” voice).

Useful Tip #1: - The SSP Self-Test enunciations.

**External Faults**

- **WINDSHIELD WINDSHIELD**: (Level 2) When “PRESS TO CONTINUE” message is enunciated at the end of Level 2 Self-Test, press the GPWS test switch for < 2 seconds.
- **WINDSHIELD WINDSHIELD**: (Level 3) When “PRESS TO CONTINUE” message is enunciated at the end of Level 3 Self-Test, press the GPWS test switch for < 2 seconds.
- **WINDSHIELD WINDSHIELD**: (Level 4) When “PRESS TO CONTINUE” message is enunciated at the end of Level 4 Self-Test, press the GPWS test switch for < 2 seconds.
- **WINDSHIELD WINDSHIELD**: (Level 5) When “PRESS TO CONTINUE” message is enunciated at the end of Level 5 Self-Test, press the GPWS test switch for < 2 seconds.
- **WINDSHIELD WINDSHIELD**: (Level 6) When “PRESS TO CONTINUE” message is enunciated at the end of Level 6 Self-Test, press the GPWS test switch for < 2 seconds.

**Probable Cause:**

- **EGPWS failure**

**Action:**

- Remove and replace the EGPWS.

* Aircraft wiring errors commonly cause these faults at initial installation. See Useful Tip #1.

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### Level 6 Self-Test

The Level 6 Self-Test provides any easy method to test discrete inputs (GND/OPEN or 2VDC/OPEN). If state changes occur on any discrete input (other than the Self-Test input) the EGPWS will announce the functional name of the discrete followed by its new state. For example, if the Glideslope Cancel discrete input is defined as GND → Cancel, and the EGPWS input transitions from Open to GND, Level 6 Self-Test will announce: "GLIDESLOPE CANCELED". Momentary discrete inputs must be held in the active state for a few seconds to hear both the active and inactive state annunciated.

#### Note:
For a complete listing of the input discrete see the Line Maintenance Manual, Honeywell Document 060-4199-180.

### Common Troubleshooting Problems

1. Ensure the power to the EGPWS is on.
2. Ensure all systems connected to the EGPWS are powered and indicating valid operation. For the GPS this may require removing the aircraft from the hangar.
3. Ensure the Radio Altimeter indicates less than 5 feet.
4. Ensure the Airspeed indicates less than 60 knots.

Have the Line Maintenance Manual, the Ground Test procedure, and the Aircraft Wiring Diagrams available during troubleshooting.

### Further testing information can be found in the Line Maintenance Manual, Honeywell Document 060-4199-180

### For further assistance:
Contact you local Honeywell Customer Support Engineer (CSE)

Contact Honeywell Customer Response Center – Technical Assistance Group (CRC-TAG) toll free at telephone 877-436-2005 or from anywhere in the world at 1-602-436-2005

Send e-mail to EGPWS@honeywell.com

Please visit the Honeywell EGPWS website (www.egpws.com) for access to additional information and free PDF documentation.

### Table: Level 2 Self-Test Annunciation External Faults

<table>
<thead>
<tr>
<th>Fault</th>
<th>Example</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrete Input Faults</td>
<td>FLAP SWITCH FAULT</td>
<td>Landing Flaps indicated for &gt; 60 seconds with airspeed &gt; 250 knots (180 for GA/Prop)</td>
</tr>
<tr>
<td></td>
<td>GEAR SWITCH FAULT</td>
<td>Landing Gear indicated for &gt; 60 seconds with airspeed &gt; 290 knots (210 for GA/Prop)</td>
</tr>
<tr>
<td></td>
<td>AUDIO CANCEL INVALID</td>
<td>Discrete selected for &gt; 30 seconds</td>
</tr>
<tr>
<td></td>
<td>TERRAIN INHIBIT INVALID</td>
<td>Discrete selected for &gt; 60 seconds (Airbus only)</td>
</tr>
<tr>
<td></td>
<td>GPWS INHIBIT INVALID</td>
<td>Discrete selected for &gt; 60 seconds</td>
</tr>
<tr>
<td></td>
<td>ALL MODES INHIBIT INVALID</td>
<td>Inhibit Discrete configured to suppress both audio and visual outputs and for &gt; 60 seconds</td>
</tr>
<tr>
<td></td>
<td>GLIDESLOPE CANCEL INVALID</td>
<td>Momentary input grounded for &gt; 15 seconds (short) or improper use of alternate action switch</td>
</tr>
<tr>
<td></td>
<td>ILS SELECT INVALID</td>
<td>More than 1 ILS discrete selected for &gt; 5 seconds</td>
</tr>
<tr>
<td></td>
<td>FLAP ANGLE UNREASONABLE</td>
<td>Invalid combination of flap position inputs (none or more than one active)</td>
</tr>
<tr>
<td></td>
<td>RANGE UNREASONABLE</td>
<td>No valid range provided for &gt; 5 seconds</td>
</tr>
<tr>
<td></td>
<td>SELF-TEST INVALID</td>
<td>Momentary input grounded for &gt; 15 seconds (short) or improper use of alternate action switch</td>
</tr>
<tr>
<td></td>
<td>AIR GROUND INVALID</td>
<td>Indicates On-Ground for &gt; 60 seconds with an airspeed &gt; 290 knots</td>
</tr>
<tr>
<td></td>
<td>MOMENTARY TERRAIN SELECT 1 (or 2) INVALID</td>
<td>Momentary input grounded for &gt; 15 seconds (short) or improper use of alternate action switch</td>
</tr>
</tbody>
</table>

### Annunciation: <BUS>-<SIGNAL> FAULT

**Example:** ILS BUS 1 GLIDESLOPE FAULT

**Probable Cause:** Input signal SSM = Fall Warning Input signal is not being transmitted Input signal update rate too slow

**Action:** Repair input signal

### Annunciation: <BUS>-WIRING FAULT

**Example:** RADIO ALTIMETER 1 WIRING FAULT

**Probable Cause:** Open wire monitor has detected no connection between EGPWS and the source LRU

**Action:** Verify wiring from EGPWS to source LRU

### Annunciation: GEAR SWITCH FAULT

**Probable Cause:** Electrical short at the gear discrete input or gear override switch activated > 290 knots

**Action:** Verify wiring from the gear override switch and/or gear input discrete

### Annunciation: AUDIO CANCEL INVALID

**Probable Cause:** Electrical short at the audio cancel input

**Action:** Verify wiring from the audio cancel switch

### Annunciation: ALL MODES INHIBIT INVALID

**Probable Cause:** Electrical short at the audio cancel input

**Action:** Verify wiring from the audio cancel input

### Annunciation: GLIDESLOPE CANCEL INVALID

**Probable Cause:** Electrical short at the glideslope cancel input or glideslope cancel switch engaged > 290 knots

**Action:** Verify wiring from the glideslope cancel switch and/or glideslope cancel input

### Annunciation: ILS SELECT INVALID

**Probable Cause:** Electrical short at the ILS Select inputs

**Action:** Verify wiring from the ILS Select switches

### Annunciation: FLAP ANGLE UNREASONABLE

**Probable Cause:** Electrical short at the flaps discrete input(s)

**Action:** Verify wiring from the flaps discrete input(s)

### Annotation: SELF-TEST INVALID (RS232 ONLY)

**Probable Cause:** Electrical short at the Self-Test input

**Action:** Verify wiring from the Self-Test discrete

### Annunciation: MOMENTARY TERRAIN SELECT X INVALID

**Probable Cause:** Electrical short at the Terrain Select inputs

**Action:** Verify wiring from the terrain "ON" switches

### Annunciation: PROGRAM PIN READ ERROR

**Probable Cause:** PROGRAM PIN PARITY ERROR PROGRAM PIN X INVALID (X is a number)

**Action:** Verify wiring to the program pins

### Annunciation: CALLOUT OPTIONS INVALID

**Probable Cause:** Wiring error to the Callout Options program pins

**Action:** Verify wiring to the Callout Options program pins

### Annunciation: AUDIO MENU INVALID

**Probable Cause:** Wiring error to the Audio Menu program pins

**Action:** Verify wiring to the Audio Menu program pins

### Annunciation: INTERNAL GPS NOT NAVIGATING

**Probable Cause:** Input source is not powered or a wiring problem exists between the source LRU and the EGWS

**Action:** Verify input source LRU is powered Verify wiring from the source LRU Verify program pin configuration

### Probable Cause:
The configuration module is new (and has never been programmed), or is faulty, or the wiring between the EGWS and configuration module is incorrect

**Action:** Programmable configuration module (see Line Maintenance Manual for instructions), verify the wiring between EGWS and configuration module, or replace the configuration module

### Annotation: CONFIGURATION MODULE NOT PROGRAMMED CONFIGURATION MODULE READ ERROR CONFIGURATION MODULE NOT COMPATIBLE

**Probable Cause:** The configuration module is new (and has never been programmed), or is faulty, or the wiring between the EGWS and configuration module is incorrect

**Action:** Programmable configuration module (see Line Maintenance Manual for instructions), verify the wiring between EGWS and configuration module, or replace the configuration module.