






SERVICE TIP	
PRODUCT:	DLP
TIP NUMBER:	ASC20040901001
TIP DATE:	09/01/2004
MODELS:	HLP4663 HLP5063 HLP5663 HLP6163
Chassis:	L62B Chassis

**SUBJECT:** Symptoms associated with DMD Board failure



**SYMPTOM:** A defective DMD Board can cause any of the symptoms listed below.

<p><b>Symptom 1-</b> When unit is turned on picture will have vertical lines across the entire screen. These lines can be black or white. See Figure 1</p>	 <p style="text-align: center;">Figure 1</p>
<p><b>Symptom 2-</b> Unit will cycle three times and then go into shuts down, All three LED's blink.</p>	<p>Monitor CN107 pin 3 on the DMD Board for 4vpp. This is the ballast drive signal</p>
<p><b>Symptom 3 -</b> Video lockup either immediate or intermittent</p>	<p>DMD Board is loading down the control bus</p>
<p><b>Symptom 4-</b> Audio OK, but no video and/or control functions</p>	<p>DMD Board is loading down the control bus</p>
<p><b>Symptom 5-</b> Unable to turn the unit off or no control of functions. The unit must be unplugged and plugged in again to power up the unit.</p>	<p>DMD Board is loading down the control bus</p>
<p><b>Symptom 6-</b> After initial turn on immediate shutdown.</p>	<p>DMD Board is loading down the control bus</p>

This information is published for experienced repair technicians only and is not intended for use by the public. It does not contain warnings to advise non-technical individuals of possible dangers in attempting to service a product. Only experienced professional technicians should repair products powered by electricity. Any attempt to service or repair the product or products dealt with in this information by anyone else could result in serious injury or death. Information provided in this bulletin is subject to change or update without notice.

<p><b>Symptom 7-</b> Color wheel running too slow. See Figure 2</p>	<p style="text-align: center;">Correct Image</p>  <p style="text-align: center;">Incorrect Color Wheel Speed caused by bad DMD Board</p>  <p style="text-align: center;">Figure 2</p>
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<p><b>Symptom 8-</b> Any stuck pixel.</p>	<p>The stuck pixel may display all white or all black.</p>
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<p><b>Symptom 9-</b> Grainy picture in all modes, see Figure 3</p>	<p style="text-align: center;"><b>Good DMD Board</b></p>  <p style="text-align: center;"><b>Defective DMD Board</b></p>  <p style="text-align: center;">Figure 3</p>
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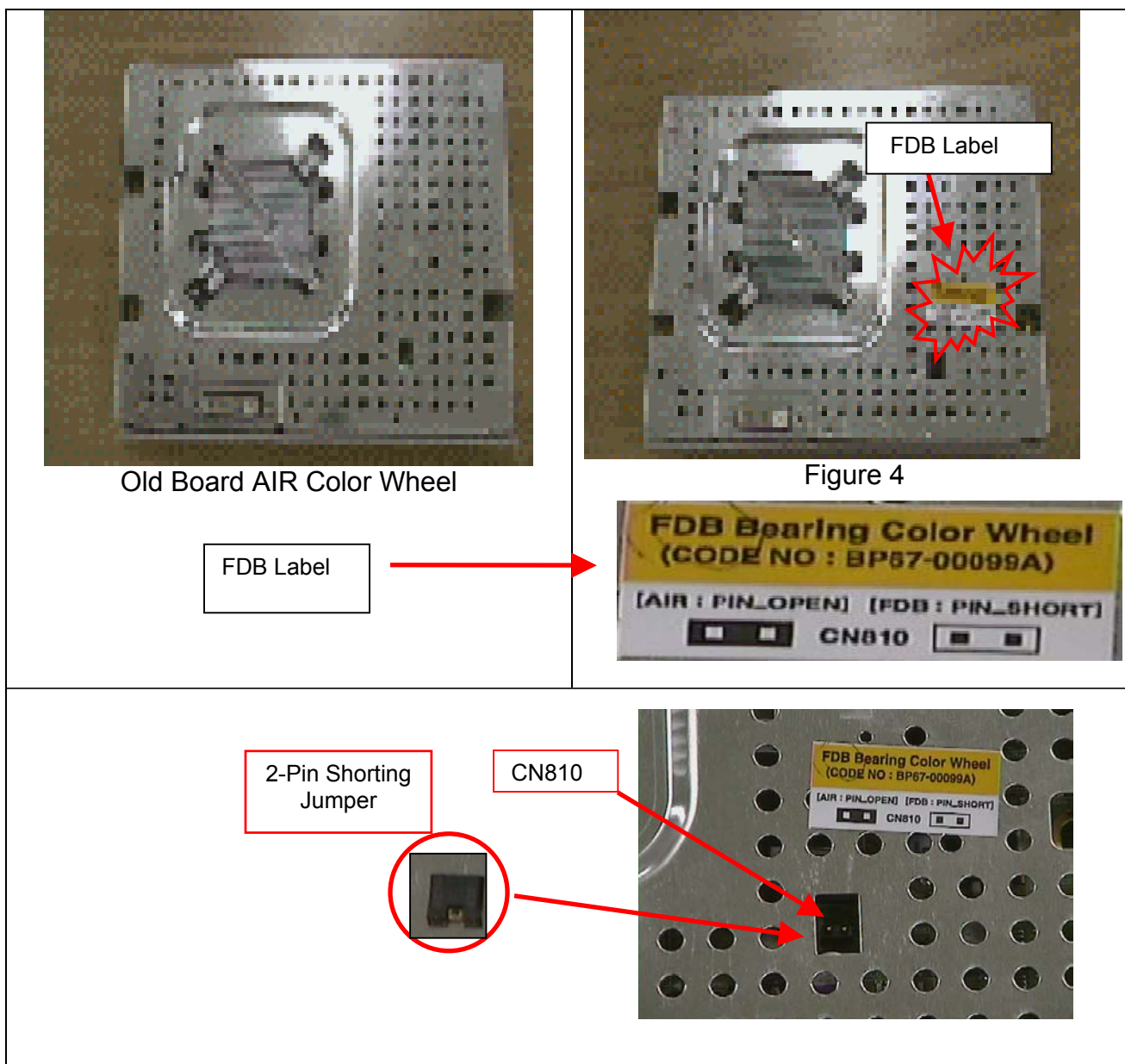
**Background:** Defective soldering on the DMD Board, Control IC DDP 1011, causes most of these symptoms. The DDP1011 IC is a BGA (Ball Gate Array) type IC and is not repairable in the field.

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**REPAIR:** Replace the DMD board and perform the tilt adjustment.

Part Used	Part Number
DMD BOARD	BP96-00678A

Note: There are 2 different DMD boards in production. Older sets used the AIR type color wheel and newer sets use the FDB Color wheel. FDB Boards include a small jumper on the DMD Board along with a label shown in Figure 4. Older Units with the AIR bearing color wheel do not include this jumper. The new type board will have the jumper installed; remove the jumper if the unit uses the AIR type color wheel.



**Note:** Consult the Samsung Service Website at ([www.samsungasc.com](http://www.samsungasc.com)) for the Service Manual and other information on this product.

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