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Subject: Re: HELP! Harman/Kardon HK-450 with blown channel!

Posted by [Wayne Parham](#) on Wed, 18 Aug 2004 03:13:14 GMT

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Sounds like you're right that it has a blown channel. They're pretty easy to troubleshoot with a scope, but even with just a DVM, you might be able to find out what's wrong. If you're comfortable with a soldering iron, remove each of the transistors one at a time and identify them as NPN or PNP. Just look up the part number with a cross-reference to find out this information. You'll also want to identify the collector, emitter and base. Using your DVM, measure resistance between base and collector and base and emitter. If NPN, the base-emitter should show connection when base is positive and emitter is negative. Base-collector should also show connection when the base is positive. Now connect reverse polarity with the base negative and both should show open. Finally, connect across the collector-emitter and you should have a connection when collector is positive and open when collector is negative. PNP acts exactly the opposite. Test in the same manner, but base-emitter and base-collector should show connection when base is negative and open when base is positive. Collector-emitter should show connection when the collector is negative and open when collector is positive. These tests are only valid when the transistor is out of circuit. If in circuit, the biasing components surrounding the transistor will often show continuity in the modes you're trying to test for open circuit. So if the transistor isn't removed from the circuit, your DVM readings will be ambiguous. You won't know if it's the transistor or the circuit causing your readings, so you have to desolder each transistor to test it with a DVM. If you're uncomfortable doing any of this, you might send it to Larry at Approved Audio Service. Larry is a great guy and he'll fix you right up. You might even write to him and get an estimate. He can probably tell you a good guess of the cost just by knowing these symptoms so drop him a note.

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