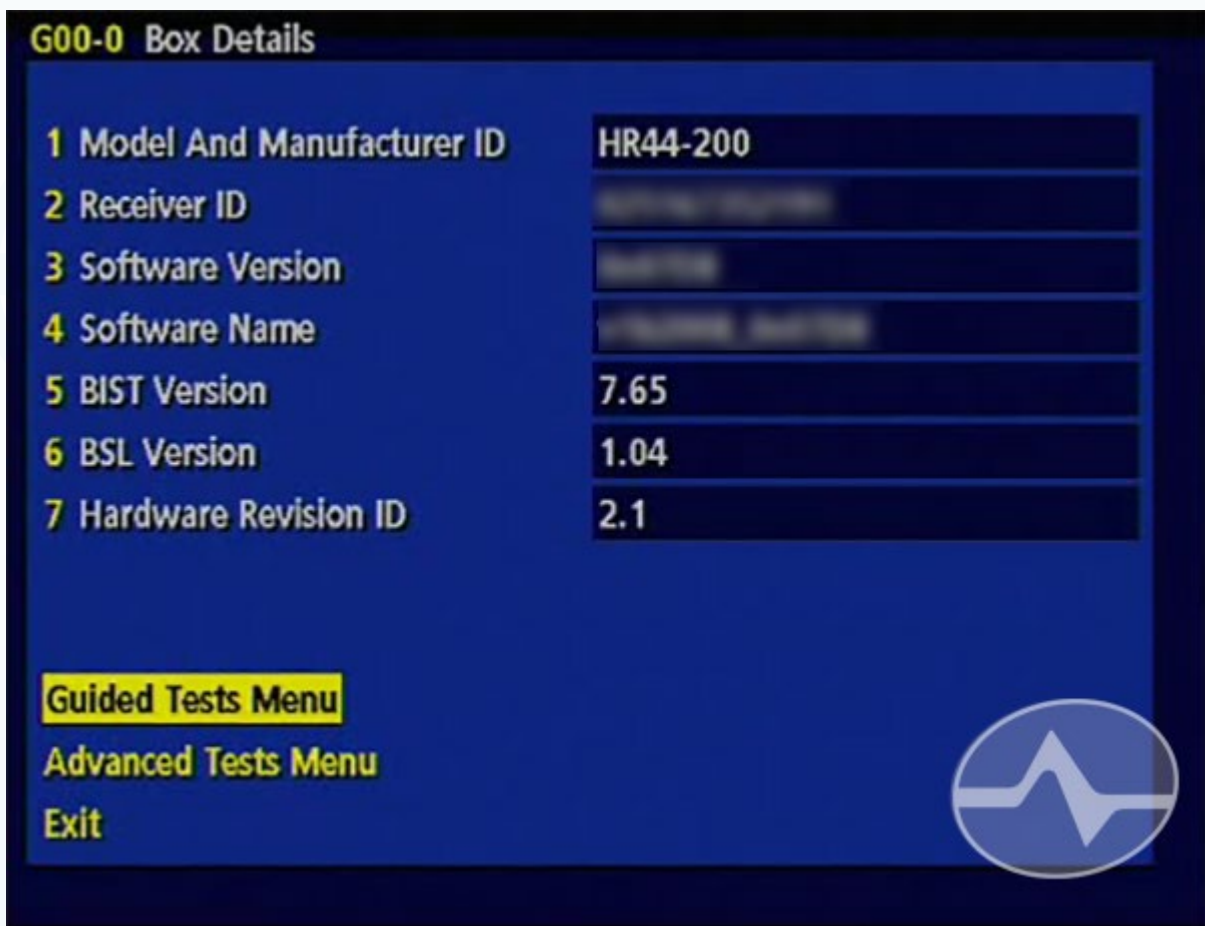


*Solid Signal shows you...*

# HOW TO DO IT



*Use DIRECTV's Built-in Self Tests*



# TESTING YOUR RECEIVER OR DVR



Sometimes you really need to get down and dirty. The basic tests aren't enough. You need the real information. DIRECTV receivers have three built-in tests that can help you understand what is going on inside that sleek black box.

**Disclaimer :** These tests are designed for **ADVANCED users**. It's pretty hard to do any permanent damage with them but as with any high-level tests it is possible to get yourself into a pickle, so be careful. If you don't think you'll be comfortable with using these tests, don't do them. Neither DIRECTV nor SolidSignal.com or its associated companies are responsible for any damage or lost data resulting from the use of advanced tests. If

**you undertake any tests not designed for the regular public you do so at your own risk.**

## STEP 1: DIRECTV's own automatic tests

When you boot up a DIRECTV receiver, it does a lot of its own tests. When you see the screen above, it's starting its test cycle. The next screen, which says "Running Receiver Self-Check" completes a lot of the same tests you can run manually. If errors are found at that point, you're told that the drive needs to be checked for errors and the receiver could be down for quite a while. This is a good thing. This test usually finds problems before they get serious.

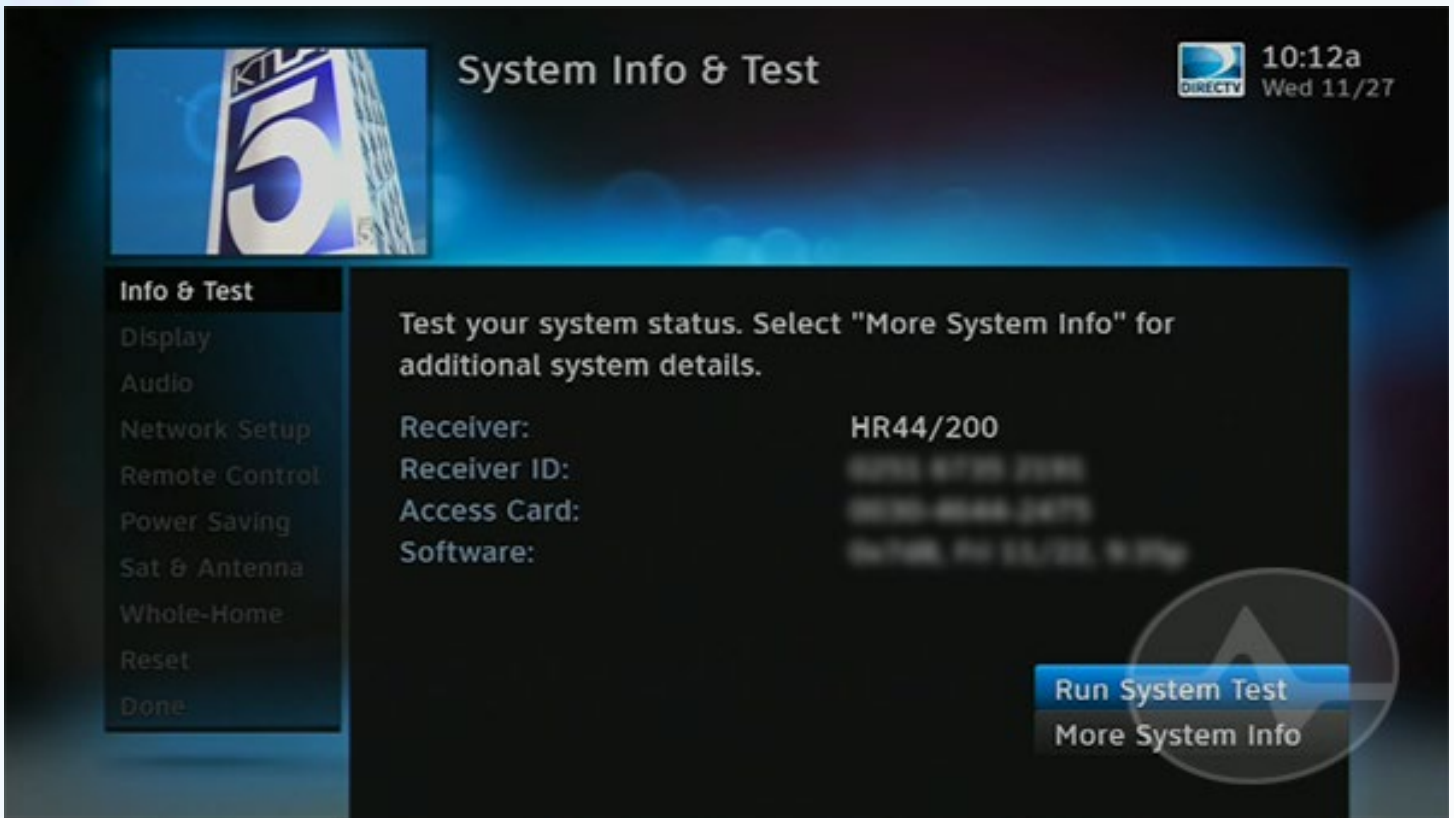
Less serious errors like corrupt files can be fixed quickly with a simple reboot. Rebooting twice within 30 minutes will clear out a lot of the temporary stuff on the DVR like guide data and that sometimes makes a difference.

### **A lot of people ask... is it better to reboot with the red button or should you go through the menus?**

For years, the conventional wisdom was that the red reset button was only for emergencies and that it was better to do a "graceful reboot" by pressing {MENU} then going to Settings&Help, Settings, Reset, Restart Receiver. Folks at DIRECTV have recently changed their tune and now say that pressing the red button isn't likely to make any difference, especially if you already suspect a problem. So, the choice is up to you.

Just a few more seconds...

# STEP 2: THE REGULAR SELF TEST



The next step is the “regular self test.” This test is available to everyone and doesn’t require any special buttons or sequences. It’s also very informative and will tell you a lot about what’s going on inside the receiver.

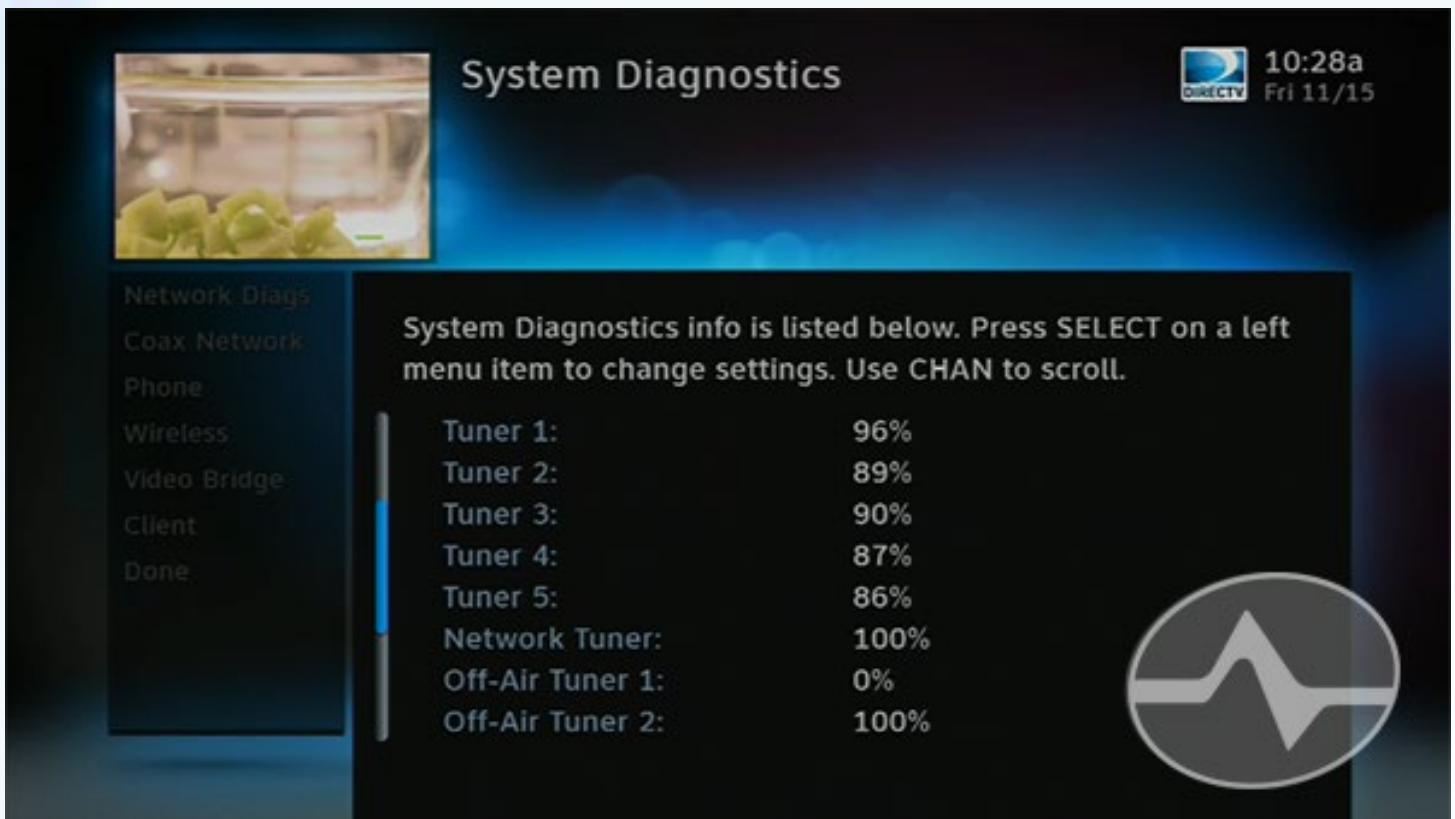
**Press {MENU} then go to Settings&Help, Settings, Info&Test.**

Then press {SELECT} with “Run System Test” highlighted. It’s normal for this test to take up to two minutes but if there are any errors, you’ll be shown a code with five numbers.

The first two numbers are the major code and you can figure out what they mean by [checking our list of Error Codes](#). For example, if you receive a code 14-122, look on the table for code 14 and you’ll find out that your hard drive probably needs to be replaced.

Some codes are normal. If you are not networked, your receiver will fail the network tests. If you don’t have a phone line connected, the phone test will fail. You can safely ignore any test that applies to something you’re not using.

# STEP 3: THE NETWORK TESTS



This tip requires an HD receiver or DVR. Go to the front panel of the receiver and press **{GUIDE} and the right arrow** at the same time. This will take some practice to get right. When you do, you'll see a hidden test menu that looks like the image above. Arrow down to "Coax Network" and press {SELECT}. You can do this part from the remote. Note: it may take several tries to get this right, it's hard to press both at the same time.

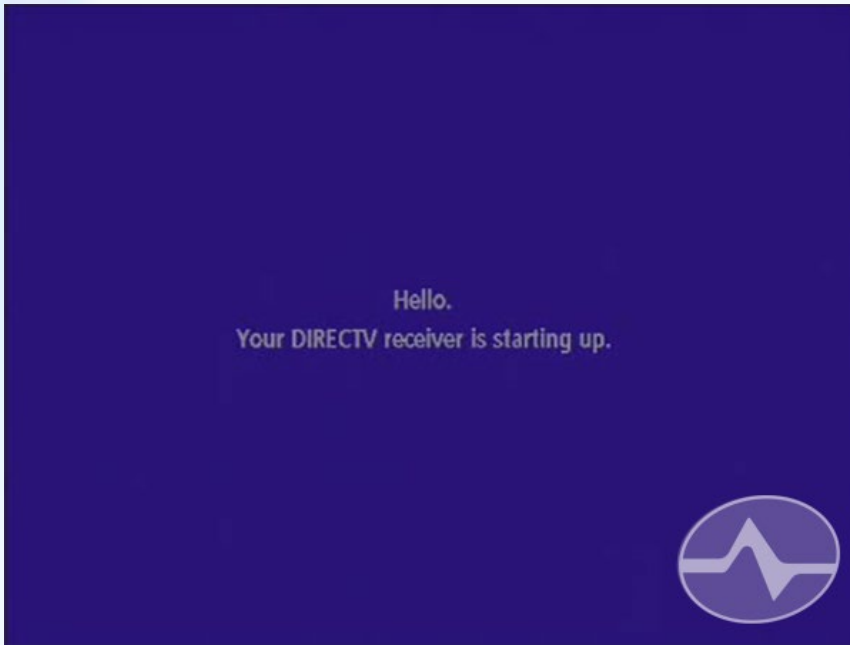
Here you will find various tests including the coax network test and network tuner tests. If you are having problems with whole-home, you might want to [read our tutorial](#) to see how to interpret the coax network tests.

You'll also see other tests relating to your phone, wireless network or wireless video bridges, if you have a Genie DVR and a wireless Genie Mini Client.

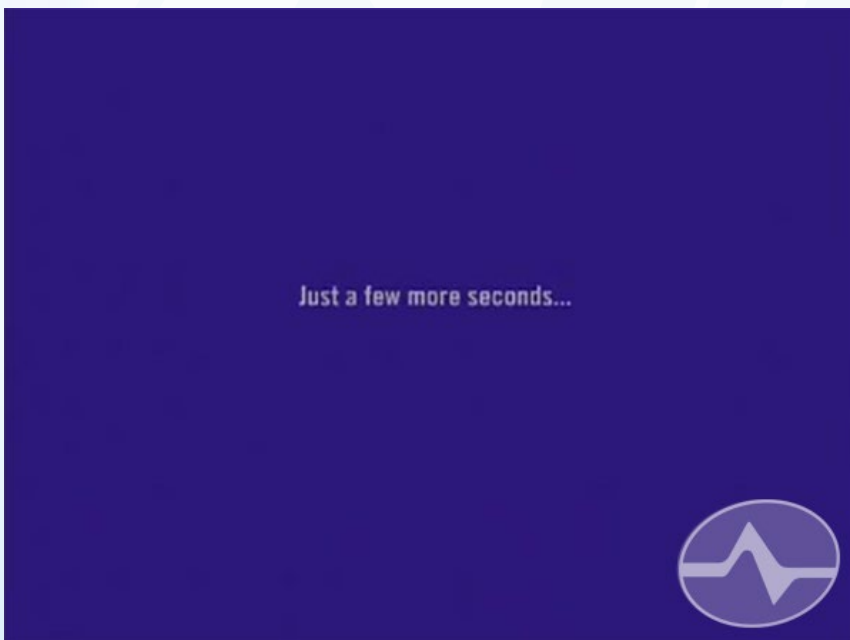
The easiest test to interpret is the tuner test which will show you what's going on with your satellite and off-air tuners. If you need to delve into the specifics of dish aiming, [read our tutorial on satellite setup](#). This test will show you not only all the tuners you can see from a regular signal strength test but also the network tuner, which is the part of your receiver that gets guide data. The Network Tuner may be called "Tuner 3" on the HR24 and earlier DVRs or "Tuner 2" on HD receivers. On a Genie, it can also be called "Tuner 6." The point is that all the tuners you see, even the last one on the list (whatever it's called) should be at about the same level. (Don't count the off-air tuners if they are shown.) If the Network Tuner is a lot lower than the other tuners, it's a sign of a problem.

# STEP 4: GETTING REALLY SERIOUS WITH THE BIST

*BIST is short for "Built-in Self Test"*



There is an even more serious test and generally only lab technicians use it. It's not designed to be user-friendly and as you'll see, DIRECTV didn't waste any time making it look pretty. It's very powerful though and can help you pin down component problems so you can decide what to do about them.



When you see the screen above (not "Almost there... just a few more seconds" but this one which only says "Just a few more seconds...") press the {SELECT} button on your remote. You can also press the button when you see "Running receiver self-check." If you've timed it right, you'll immediately see the built-in test screen.

*(Those aren't just bad screen captures, that's how the screens look. You could be forgiven for thinking you're looking at some sort of 80s proto-computer but honest, these come from a DIRECTV Genie DVR. Other receivers will look similar.)*

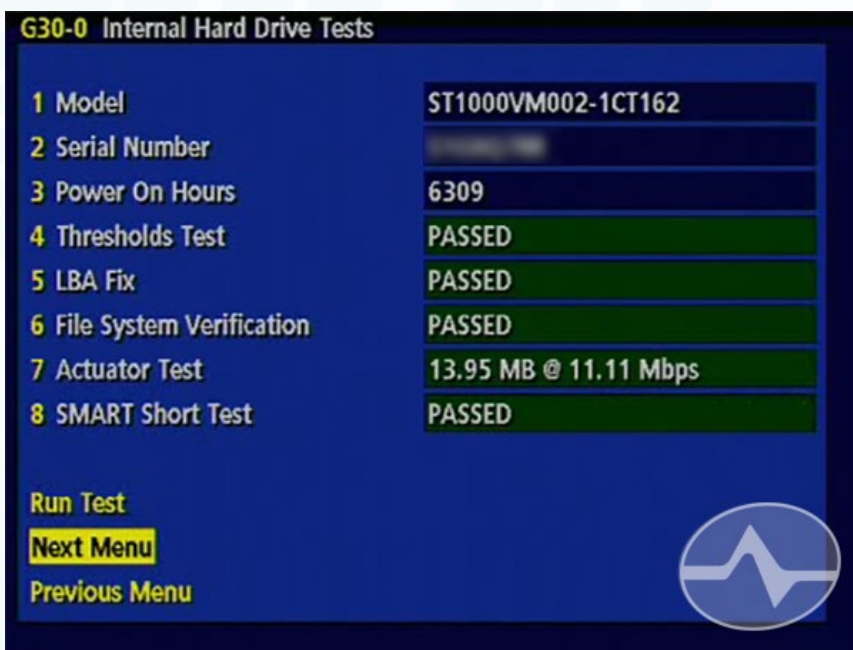
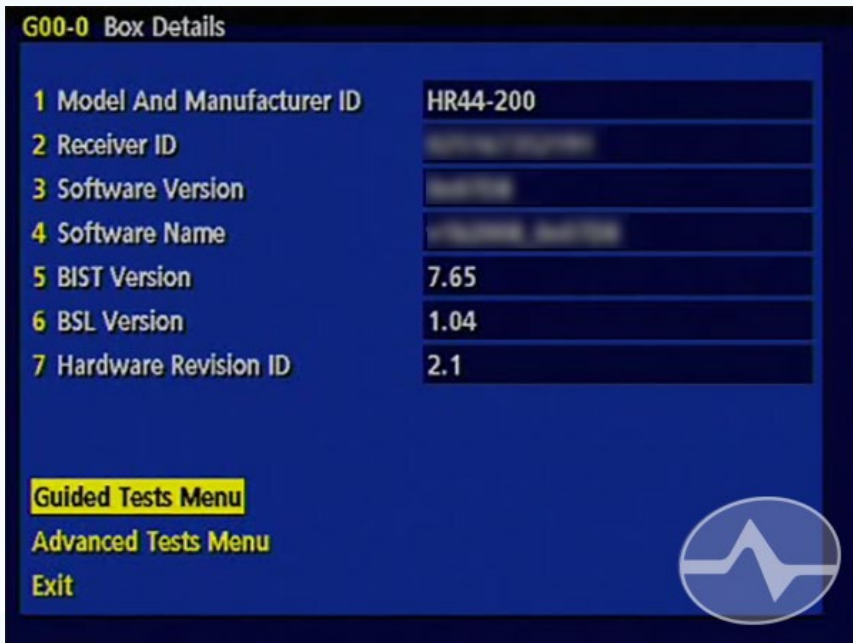
Start with the "Guided Tests." They will take you through every bit of the test process with less possibility that you'll accidentally go somewhere scary.

# STEP 4: GETTING REALLY SERIOUS WITH THE BIST

*BIST is short for "Built-in Self Test"*

You'll see a series of tests you can run. For the most part, like this hard drive test, the result should be "passed." However in some cases it's perfectly normal to see "failed." Some receivers like this Genie, almost always report an error in flash storage, and some receivers report an error in a hard drive even if they don't have a hard drive.

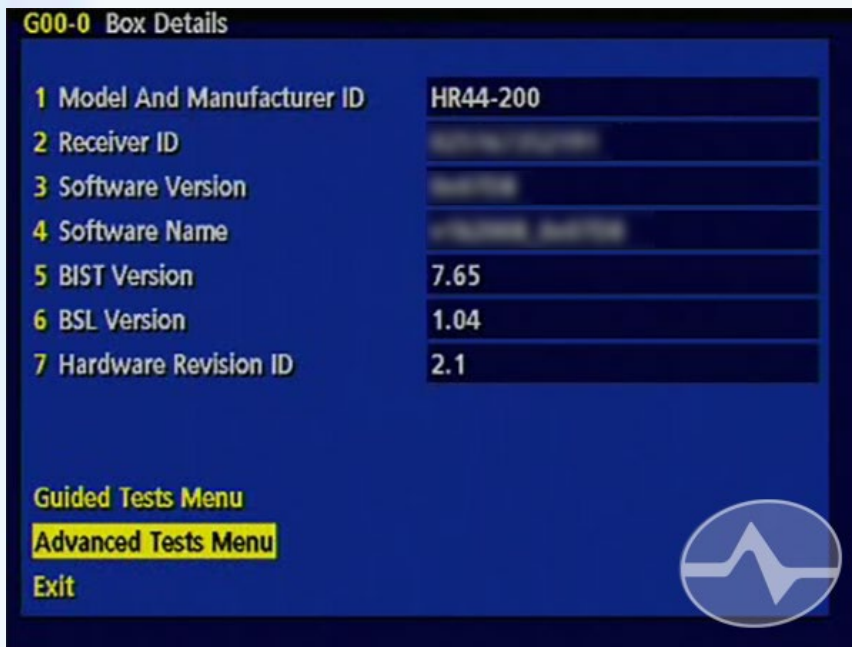
The key here is not to get worked up if your receiver is working perfectly. If all your tuners are working, if the hard drive isn't giving you any trouble, an error in these tests may not be cause for alarm. Remember that this test is designed for technicians in a lab, who have guides that take them through the process.



## WILL DIRECTV HELP YOU?

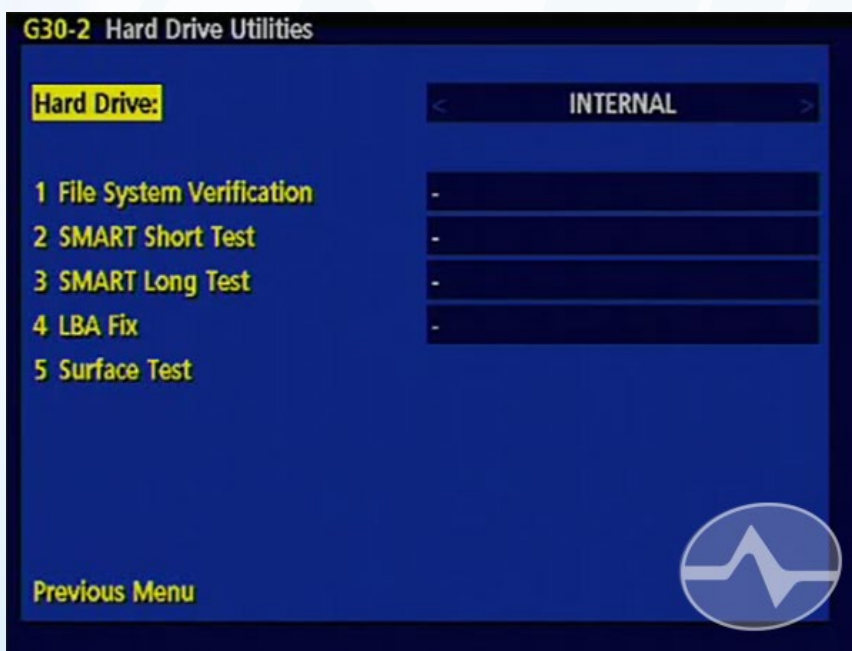
When you run tests like these, you're doing it at your own risk. If the goal here is to get a replacement receiver, telling DIRECTV's CSRs about your findings isn't likely to get you anywhere. DIRECTV's own CSRs aren't trained in the use of this test. You're much better off asking for help in the [Solid Signal forum](#) or your support forum of choice, where professional and volunteer experts can help.

# THE ADVANCED TESTS MENU



The Advanced Tests Menu lets you run a lot of very specific tests. It also allows you to run some very deep tests on your hard drive, as well as testing your receiver's abilities to use front panel buttons, the remote, and even check your network and satellite connections.

To do the hard drive tests, go into the Utilities Menu. The five tests you'll find there will probably take a total of 20-30 hours to complete, but they are your best hope of salvaging your data if you suspect a problem.



## What to do if you find a problem

If these advanced tests find a problem, more often than not it's a sign that the receiver or DVR is failing. Things like the front panel test or pairing tests can tell you if a problem is likely to be with a remote or with the receiver, and the drive tests can help you get

back up and running for the short term, but a failed test that corresponds to a problem you're having usually means it's time to swap out that box.

**Again remember...** not every failed test means that the receiver's ready for scrap. If a test fails but the receiver isn't giving you any problems, that just may indicate that the test is supposed to fail for one reason or another. If you post questions here, we can help you interpret the results and give you a suggestion on what to do next.



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