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## BIRDOG USB Plus Satellite Meter

CONFIDENTIAL INFORMATION



## Professional installers need professional tools.

If you're out there in the field you need a meter you can trust. My friends up at the Solid Signal corporate offices sent me a Birdog USB Plus by Perfect10. This is actually one of the lower priced full-function meters and yet it looks like it has everything you need to do the job. Let's take a look.

The Birdog USB Plus comes packaged in a very nice leather bag along with a power cable for a home outlet as well as a vehicle power cord. Instructions are provided in English and Spanish. Also included are a USB cable for downloading data to a PC and two barrels that are designed to be sufficient for high-bandwidth operation like cable or satellite TV.



The whole package is light and gives the impression of being designed for durability and weather resistance. When the meter is in the bag a supplied plastic rain cover protects the front so that the whole assembly is relatively safe from the elements, although it is definitely not fully waterproof. Use caution when doing any work of this sort in bad weather.



With the case closed it is still possible to power the meter from the wall or from the vehicle adapter. Tabs with velcro closures cover the back power port for power to the wall and the side port for power from a vehicle. The USB port is not accessible without removing the meter from the case, and a sticker on the case lets you know that the supplied batteries are discharged while in shipping so the meter should be charged for a full 24 hours before use.





The underside of the meter shows the user-replaceable battery pack behind a plastic hatch. This battery is shipped installed in the meter and is similar to a cell phone battery where the batteries are shrinkwrapped together in plastic. These are NiMH batteries and so it's likely that over the course of several years their performance will degrade to the point where you will want to replace them.



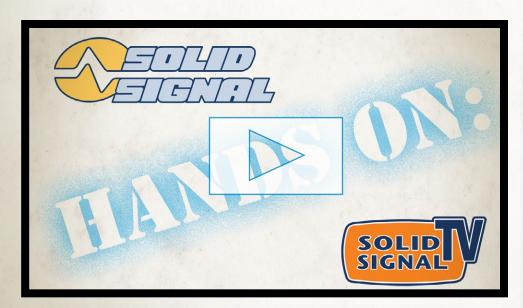






Honestly I didn't know what to expect from this meter before I saw it. I was pleased to see that it is neither overly large nor overly heavy. The case is well made and seems to be genuine leather and there is a decent length shoulder strap as well. There is plenty of high-quality velcro attached. Granted this isn't a fashion accessory but when you're out there on a job you want to look like you've got modern equipment with you. The Birdog meter is bright yellow which gives it sort of an industrial look as well.

One feature that will definitely be appreciated is the extra bit of velcro on the top of the case. This is one of those little design features that will prove itself over and over in the field. The cover flips up and stays up, giving a little bit of shade to the front of the meter and keeping the cover out of the way while doing readings. Also included, and shown in this shot, is a rubber cover for the output port. The Birdog can be used as a passthrough so that satellite signals aren't interrupted during testing.

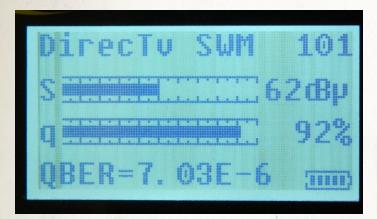


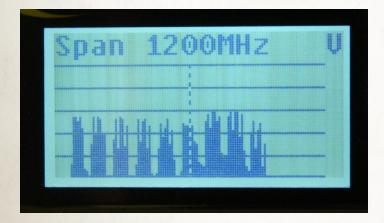
Click above for an exclusive video tour of the Birdog USB Plus including seeing the meter in action!

## USB CONNECTION

The Birdog USB Plus, as its name implies, is designed to log data and dump it to a computer for further analysis. This doesn't seem to be a really critical function but it also doesn't get in the way of using this meter in the field. The installation process seems easy but I think the manual needs to be updated for Vista and Windows 7.







## **PERFORMANCE**

Using this meter was extremely easy. Turn it on and you have the option to choose from a list of presets for different satellites. All of the satellite settings for HughesNet, Dish Network, and DIRECTV are included, and the meter is SWM-compatible. The meter beeps in different ways to show what it's doing. As it is searching for a satellite signal it beeps slowly, and when a signal is found, it beeps more quickly depending on the strength of the signal. Pressing the up arrow puts the user in a menu and also stops the beep temporarily which can be useful if it's necessary to concentrate or to listen to someone or something else in the field.

I appreciated the yellow, high visibility case and button labels when I was in my dark garage taking measurements. It made a big difference.

There's a lot of information displayed on a small screen. The signal is displayed in dB $\mu$  (dB microvolts) as well as a percentage similar to the one used on satellite receivers. There is also a second screen displaying signal-to-noise.

For DIRECTV technicians, the meter can show signals from the 72.5, 101, and 119 satellites as well as output levels from the SWM at 101 and 119. It is fully compatible with Ka and Ku band transmissions.

In addition to the main measurement screens which are most likely to be used in the field, there are several other signal screens which, to be honest I did not understand. I'm sure that master technicians and RF engineers would find screens like the one displayed at left to be useful. They are easily found through a simple menuing system.

I used this meter for the better part of a week doing integrity tests and measuring the signal loss through several components in my home for a future article I'm writing. Other that the sound, which got to be a little annoying after several hours, it worked perfectly. It helped me identify a bad cable in my system as it has built-in protection against shorts.

I would definitely recommend this meter to anyone who needs a basic dependable full-function meter. I know the SuperBuddy and AIM meters have more features and can be used for more detailed measurements than the Birdog but this seems like a really decent solution and a great value. For someone who does basic installs or even for an enthusiast who is looking for a quick way to set up and align a dish for temporary use, it's a good choice.

