



BIRDOGG

www.birdog.tv

Inside the box:

The Birdog meter comes in it's own box, with instructions and all the accessories.



The Birdog Meter!

Hand held

Powers a single LNBF for more than 3 hours

Easy to use

Fast and responsive, locks onto the satellite in less than 100 milli-seconds

Small: 6.8x2.2x4.8 inches
and

Light-weight: less than 2 lbs



First :

The Birdog meter is supplied with NO CHARGE in the battery, so the battery needs to be charged for a minimum of 24 hours, first thing!



Charge via the supplied AC power cord (connection at the rear of the meter) through the access flap.

Or, the auto DC charger/cord to the connection at right hand side of the meter (there is a flap for access). *Please note in some vehicles, the ignition needs to be turned on for power to the DC socket.*

IMPORTANT :

When the meter is shipped it is preloaded with a default list of satellite selections. See *list at right*.

If your installation requires a selection

other than one in the default list; a personalized list may be downloaded FREE OF CHARGE from www.birdog.tv

Keep in mind that if the wrong selections are loaded; or the signal provider (e.g.: DirecWay)

has made changes to the signal being transmitted; the meter will NOT LOCK ON the desired satellite!!!

As the program providers sometimes change the transponders settings it's important to make sure you download fresh selections often!.

If there's a problem acquiring a "FOUND" on the selected satellite, **ALWAYS REDOWNLOAD NEW SETTINGS FROM THE WEB, PRIOR TO RETURNING THE UNIT AS DEFECTIVE.**

TO DATE; OVER 50 % OF ALL RETURNS ARE DUE TO THE LATEST SETTINGS NOT BEING DOWNLOADED !!

DEFAULT LIST (as shipped):

AMC3 87 West
Galaxy11 91 West
Galaxy 3C 95 West
Galaxy 4R 99 West
Satmex 5 116.8 West (these are for DirecWay)
3 rd gen LNBF for 101 and 119 West (Phase III)
DishPro for 110 and 119 West
Superdish for 105 West
Superdish for 121 West (these are all for DTH)

For other selections, go to:

www.birdog.tv

and select "**CONFIGURE**" (scroll to bottom of page for list of "Available Satellites").

Next:

Before beginning, you will need a good quality jumper coax.

It's important that this is a GOOD QUALITY and USES SCREW ON F CONNECTORS.

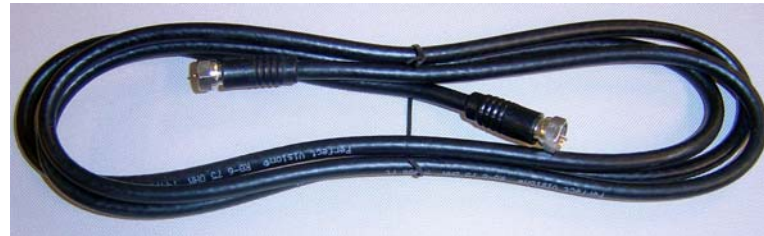
DO NOT USE PUSH ON F CONNECTORS as after about the 10:th use they will become unreliable and intermittent. Causing shorts or the Birdog to display "I2C ERROR/LNB SHORT".

The push-on F connectors will also wear down Input center-conductor hole (on the Birdog meter) and reduce the service life!

Either make your own lead from the stock you carry, or a 6 feet lead can be ordered from Perfect10 order code:

PVFFP6

Tip! Carry a spare !



Let's Start:

Assemble your dish; (and set parameters) . Using a compass, point in the general direction indicated. Attach LNBF



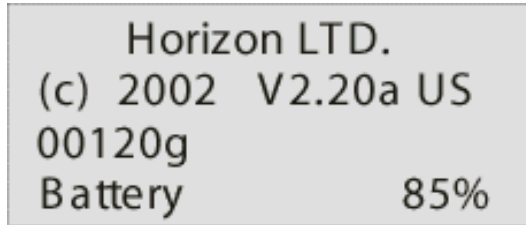
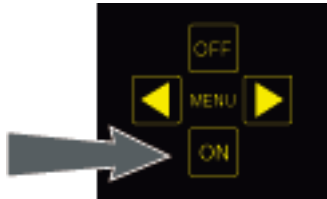
Connect your jumper to the F connection on the LNBF

Connect the other end to the **“Input”** on the Birdog

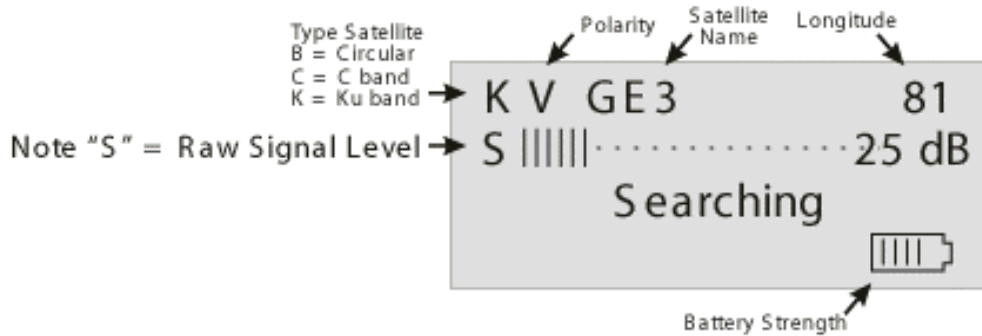


Power the Birdog "ON":

Press and hold for up to 5 seconds

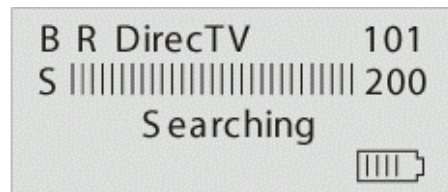


First screen indicates version number, satellite list code and battery strength. *The meter scrolls to the next screen automatically.*



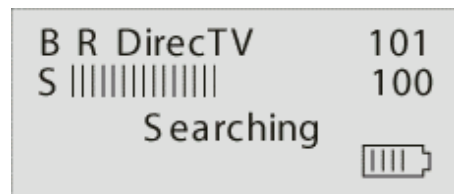
The second screen indicates the first satellite in the menu, the polarity, the longitude of the satellite, raw signal received, battery level and "Searching" (since the satellite has not been found yet).

The above sample shows Ku band Vertical Selection for GE3 at 81 deg west



If the S (raw signal) bar graph is maxed out, press the (ON) button once to attenuate the signal.

Attenuated signal displayed:

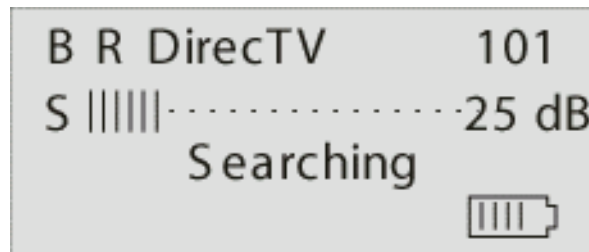
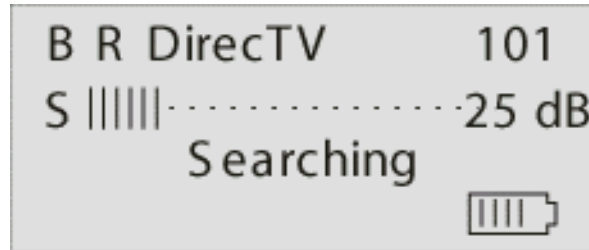
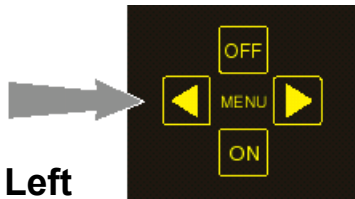


Screen will display 'Auto Ranging' and the max value is now centered.

The AUTO Ranging only works is the meter is in SEARCHING !

Select your Satellite:

Right & Left
arrows scroll
satellites



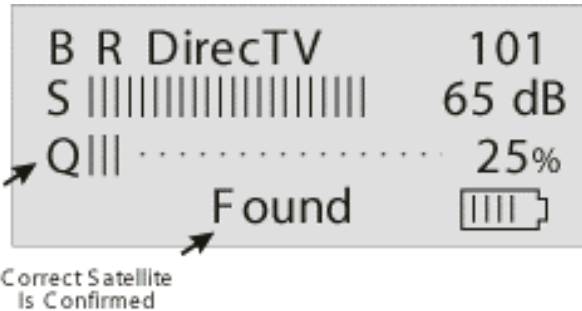
Find your satellite selection by scrolling (Right/Left button) through the stored memory. In this example, the V pol. (right Hand) of DTV @ 101 West has been selected

The display indicates a weak raw signal "S" and the text message "Searching". Keep scanning the sky, increasing the "S" value until the meter beeps and "Found" is displayed, along with an additional "Q" value (Picture Quality) bar graph..

Fine-tuning your dish to the selected satellite:

Move the dish until "Found"

Note "Q" = Inverse of Data Error Rate



As you move the dish into the footprint of the signal, the "S" value (top bar) will increase until the meter begins reading the digital data and "Found" is displayed. Next, maximize both the "S" and "Q" values for the strongest reception.

Maximize signal and Tighten Bolts



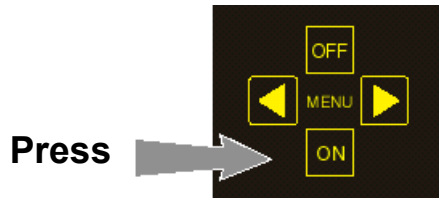
"Q" is now maxed out,
"S" is maxed out.

That's it.....

You are done!

Tighten the mounting bolts.

Signal to Noise Ratio & Corrected BER value:



If you would like to look at the Signal to Noise Ratio, the Birdog can provide it, as well as confirming the (“V”) Bit Error Rate (after error correction or, F.E.C./*Forward Error Correction*):

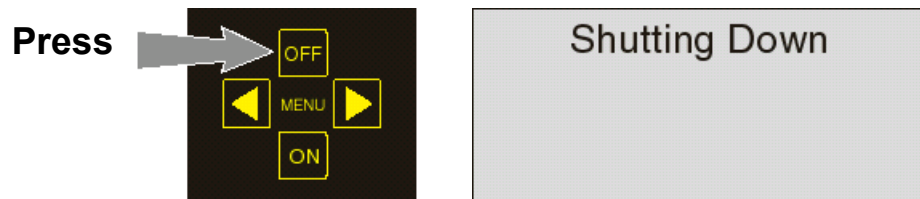
After “Found” is displayed, press the “ON” button once.



The “S” changes to a “C” and now reflects the C/N noise ratio in dB.

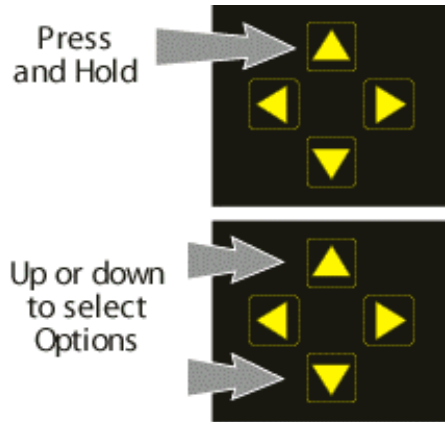
The “Q” changes to a “V” and now reflects the corrected BER in a percentage.

To power the meter “Off”:



To turn the Birdog off, press and release the up (OFF) button. The display will read “Shutting Down” and the LCD display screen will go blank.

Setup Mode:



Continue scrolling down to reach these options:

```
▶ Exit
  Backlight on
  Clicking off
  Sleep 6 Mins
```

```
▶ Sleep 6 Mins
  Defaults
  English
  RF Linear
```

```
English
RF Linear
Found
▶ BER Linear
```

```
B R DirecTV      101
S |||||          75 dB
Q |||||          95%
  QBER = 1.90E -7 [||||]
```

An Example with BER displayed in E value

The Birdog must be turned off to access the Set-up screen.

To access the **Set-Up Options**, press and hold the up (OFF) key. You will see the screen displayed at left.

The down (ON) key indexes, or scrolls, to the next option.

The right (or left) key changes the status.

The setup mode allows:

Backlight	- On/Off
Clicking (Audio)	- On/Off
Sleep / Auto Off	- "1 minute" to "Always On"
Defaults	- Restores factory settings/default
Language	-English, Spanish, French or German
RF dBuV	-RF (S) level displayed in dBuV or linear value (255 steps)
FOUND	-BER displayed as E value, or "FOUND".
BER Log	-BER Scale in LINEAR or LOGARITHMIC
BER Linear	

Downloading from the website:

You can customize your own list of personalized satellite selections (up to 32 selections) from the website. Periodically, signal providers make changes to settings, requiring a new download in order for the meter to lock on the signal. If known changes in the signal occur (*DirecWay Transponder Change Notification*), or the Birdog suddenly stops locking on a specific selection, download a new list from the website.

The website www.birdog.tv has a “**Configure**” tab, where you may acquire the latest selections (and instructions for downloading) in a list (bottom of the “**Configuration**” page).

The website’s selections are kept current through our own monitoring station in Maryland, we check ALL U.S. satellite signals in Ku band and DSS, 4 times daily, 24 hours a day/7 days a week..

Requested selections such as *Star Choice* in Canada cannot be programmed as this service is a Digicipher 2 (encoding) format and is **not compatible** with the MPEG and DVB transmission signals that the meter requires for a “lock”.

Some C band satellites selections will have similar problems, also.

Once new satellites have been launched and the service is active, they will be added.

We also provide, special-programmed settings to customers that require unusual satellites and may not be located in the Northern American footprint (provided the customer can e-mail enough data on the settings) in approx 48 hours from receipt.

Trouble-Shooting:

“My meter has stopped locking on one satellite; what’s up ?” The setting has most likely changed. Go to www.birdog.tv and select “**Configure**”. Then, select the satellites of your choice from the box labelled “Available Satellites”. Note that once your new file is loaded to the Birdog, all previously stored satellites will be overwritten.

“I left my Birdog in the van for 4 weeks, and it was fully charged when I left it. Now there is no power, what’s up ?” The meter needs re-charging, and despite that it had a full charge and when switched off; monitoring files are always active, and will deplete the battery level over time. Simply charge the Birdog again.

“I get an error message of I2C Error when I try to align the dish” This error message means that there’s a communication problem somewhere between the LNB and the meter’s components. Check for continuity problems in the coax/connections, or battery leads. Ensure you meter’s battery level is adequate (cold weather/current draw of LNB/low battery levels will contribute to the error message “I2C Error”). Quick-connect F connectors will also cause this error message.

“My meter shuts off (with “Battery Low”) shortly after powering on” Check quality of the battery pack first, and/or complete “Hard-reset” (detach/re-attach battery leads) for resetting the battery file in the meter in order to adequately charge up the battery.

“I’m not getting a “Found”, and/or signal strength values seem too low” Make sure the set-up option of BER Linear/BER Logarithmic is appropriate for your signal (BER Logarithmic is required for detection of lower frequency signals such as the *SuperDish* selections).