Birdog Meter Advanced Tech Info

The Birdog satellite signal meter has many advanced features that can assist in aligning the dish and/or troubleshooting the system.

ALIGNMENT FEATURES:

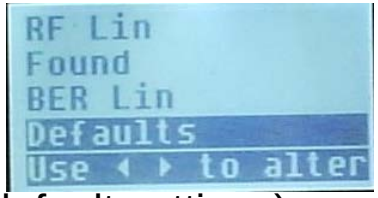
In the Birdog setup menu, besides the usual meter features of backlight, auto off, etc, there are 3 specific settings which can affect your alignment readings.

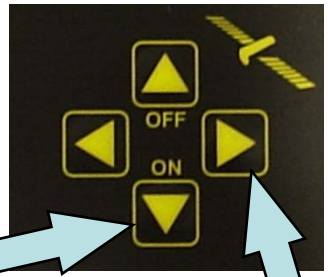
To access the setup menu, with meter powered OFF, hold down the OFF or ▲ button.

The setup menu will then appear

Scroll down the setup menu to:

RF Lin
Found
BER Lin
(These are default settings)



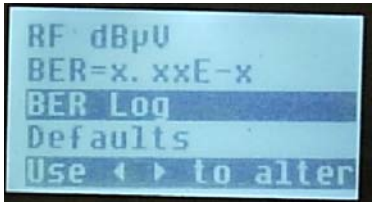


To Scroll

To Change

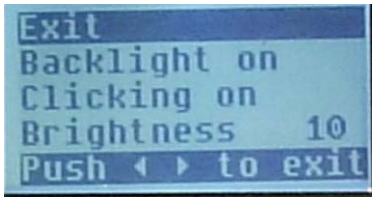
Change these settings to:

RF dBuV
BER=x.xxE-x
BER Log



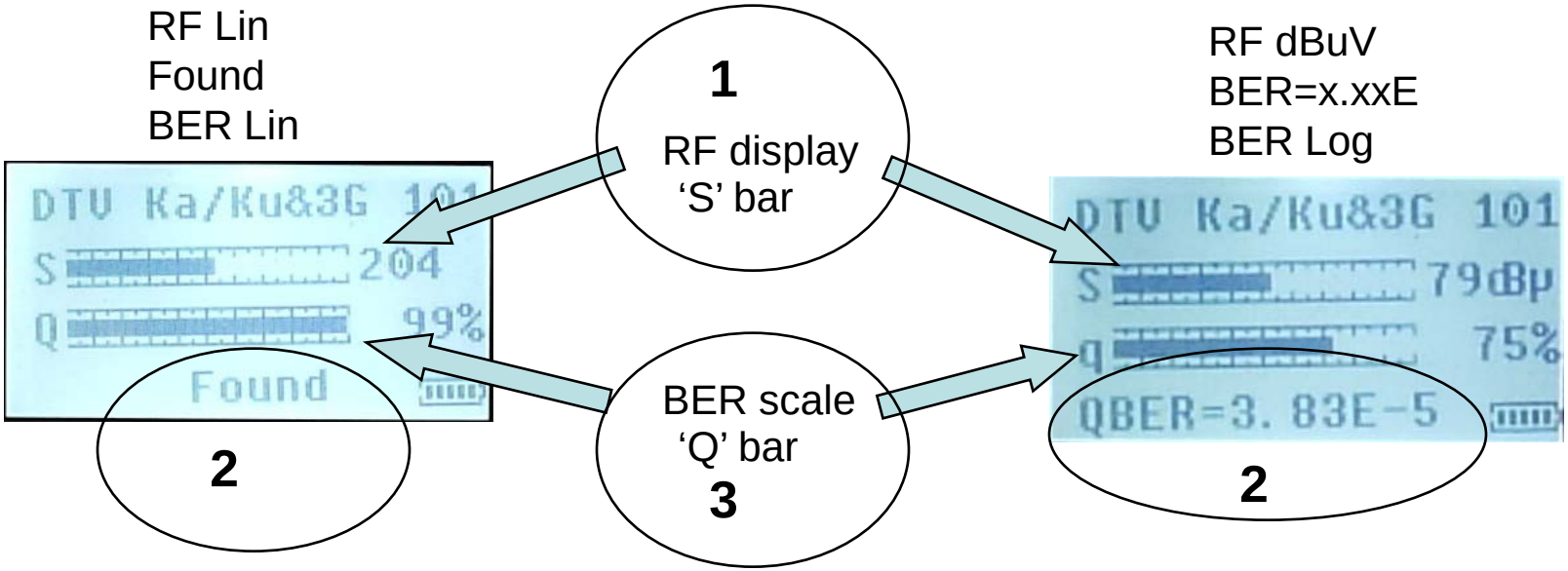
Scroll to each of these 3 lines and select the right or left arrow, this will change setting.

Scroll back up to ‘Exit’



Select right or left arrow, Meter will power off and new settings will be saved.

What is the difference in these settings?



1 RF Lin displays a linear bar of raw signal only.
RF dBuV displays the signal in actual dBuV format.

2 Found just indicates that satellite has been found.
BER=x.xxE-x is the actual Bit Error Rate of the signal.

3 BER Lin is an inverse linear display of the pre (before corrections) BER scale. Use for stronger signals to fine tune the top end of the scale.

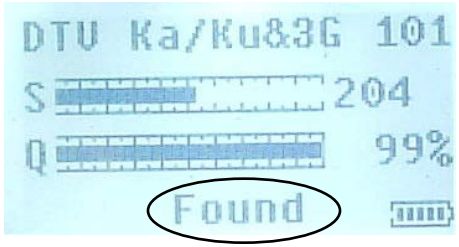
BER Log is an inverse mathematical ratio (Logarithm) display of the pre BER scale. It is more sensitive & should be used for weaker signal satellites.

Carrier to Noise Ratio (C/N)

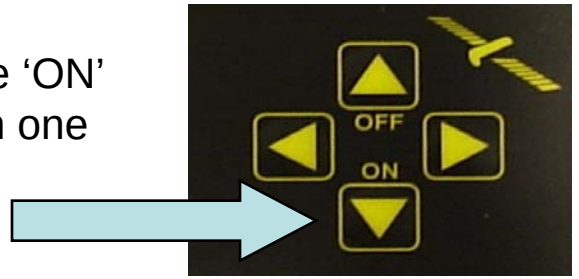
The Birdog meter can also display the carrier-to-noise ratio. This is possibly the best alignment feature of the meter because the carrier to noise ratio is a measure of the received carrier strength relative to the strength of the received noise.

The higher the C/N ratio, the better quality of reception.

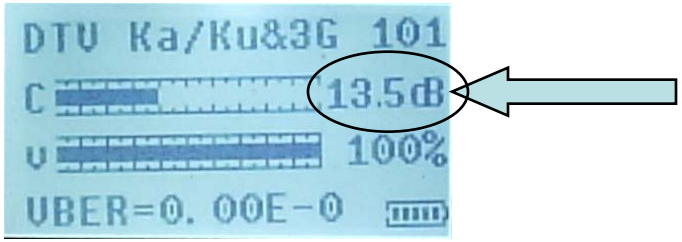
To access the C/N display, the meter must be 'locked' on the satellite.



Hit the 'ON' button one time.



The S & Q bars will now read as C & V, with 'C' being the C/N in dB's. The 'V' line reads the BER after correction.

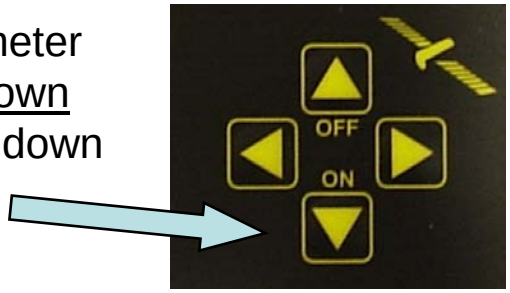


C/N ratio in dB display. Always peak this number higher for best signal quality. For example, to pass cross-pol in a 2 way system.

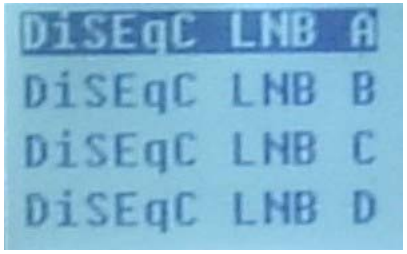
Troubleshooting features of the Birdog.

1. With the RF display set to read as RF dBuV, you can measure in dB the signal loss in in a cable run by measuring the signal at the dish, then again further downstream in a distribution system to locate problematic outlet points.
2. The post BER ('V' line of the C/N display) is a good indicator of noise ingress into a system, either by poor cabling, antenna alignment or equipment failure. If the post BER is a low percentage, this may indicate problems with the quality of the digital signal. Test at different points within the system to locate the problem.
3. If there is a short in the cabling, the Birdog meter will display 'LNB Short'. This could be caused by an actual short, or by poor connectors or poor cable.
4. It is also possible to generate DiSEqC switch commands at the antenna to verify the operation of a switch or multiport LNB.

With the meter on, hold down the ON or down button.



The DiSEqC command will appear



Select the lnb by scrolling to the one you want, then press the right or left arrow.