

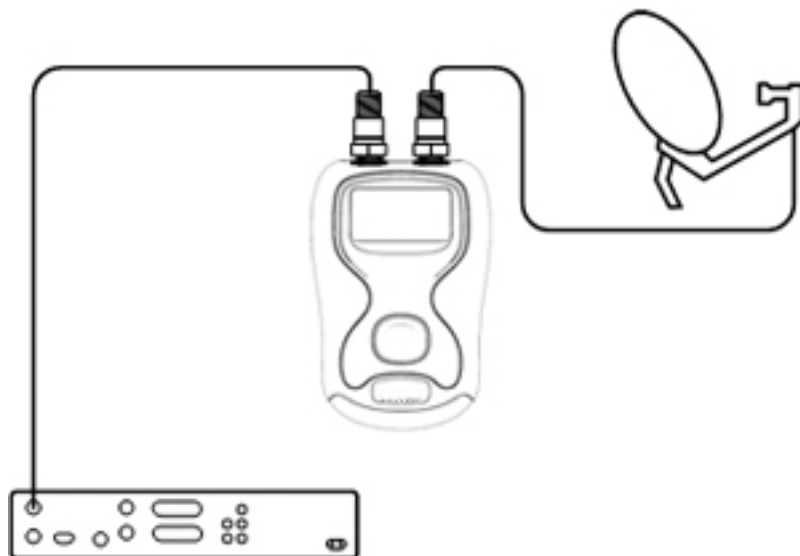
Quick start guide

Your NanoSat satellite meter is ready to use straight out of the box, and every thing you need to begin is supplied. Lets take a look at how to connect up your satellite meter to the set top box and LNB on the satellite dish so that we can get started on finding satellites straight away.

Connections

By removing the NanoSat from its carry case you will find that next to the connectors on the top their are symbols of a set top box and a satellite dish, this shows how your meter should be connected (as illustrated right).

Now that your NanoSat is connected to your set top box and the LNB on your satellite dish ensure that your set top box is switched on then press and hold the function button on the meter to switch it on. You can select the satellite you wish to find by tapping the function button until the required satellite name is shown at the top of the display.



Finding satellites

In this example we will be looking for the Astra-2A at 28.2 East (which is where services such as Sky and Freesat are found). Ideally for the UK your satellite dish should be sited in a location that is facing the southern horizon with a good line of sight (plenty of clear sky without very nearby obstacles such as trees or buildings). Satellite finding is best done with the following technique. Ensure that your satellite dish is mounted on its fixings so that the bolts are biting just enough to allow you to move the dish and it will hold its position in both Elevation (up and down) and Azimuth (side to side). Also the LNB clamp should be just tight enough to hold the LNB in place when you are adjusting the skew (clockwise and counter-clockwise rotation of the LNB). Some LNB's have a 5 position adjuster for this purpose and come with the LNB skew preset (typically on small dishes) as supplied by the satellite service operator.

Point your dish slightly downwards so that the face is about 5 to 10 degrees off vertical and slowly move your dish from east to west across the horizon in a slow smooth motion keeping an eye on your meter display. On reaching the end of each sweep tilt the dish back a little (raising the elevation) and sweep back again in the same slow smooth manner. You will notice that the signal level display will rise and fall as you pass different satellites. When you are getting close to your selected satellite the unique satellite direction finding system will display arrows telling you which way to move your dish (from the perspective of standing behind your dish).

Improving your signal

Now that you have acquired your satellite follow these steps to further improve your signal. While the display is showing found move the dish very slowly off the target satellite in either a left or right direction (Azimuth adjustment) until the signal level just starts to drop away and make a mental note of the position of your dish, now move the dish back in the opposite direction watch where the signal level peaks and continue until the level just starts to drop off again. Now move you dish back to the centre of these two points (the Azimuth is now optimised). Tighten the clamp bolts to lock the Azimuth position.

We can apply the same procedure to the up and down motion (Elevation adjustment), again we are looking to see where the signal just starts to fall away and move while moving up in Elevation make a mental note

of that position and then adjust the elevation down until the signal level just starts to drop off again. Then return your elevation position to the centre of these two points (the Elevation is now optimised). Tighten the Elevation bolts.

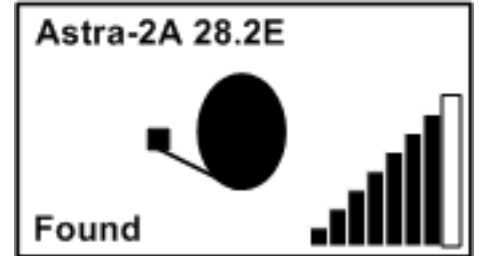
The final step for making fine adjustments to optimise your signal is the polarisation of the LNB (adjusting the skew). Depending of the style of dish you own this can take two different forms. One adjusting the skew of the whole dish (via a mounting plate on the rear of the dish) or two rotating the LNB clockwise or counter-clockwise in the LNB clamp.



The screen above shows a low level with no lock.



The screen above shows that you are getting closer (as indicated by the arrows) to your target satellite.



Here we have found the satellite, make small adjustments to the dish and LNB to maximize your signal.

We can apply a similar procedure for the skew adjustment, again we are looking to see where the signal just starts to fall away and move while rotating the LNB (or dish assembly) make a mental note of that position and then adjust the skew in the opposite direction until the signal level just starts to drop off again. Then return your skew position to the centre of these two points (the polarisation is now optimised). Tighten the LNB clamp.

FAQ

In this section we will cover the most Frequently Asked Questions about the NanoSat satellite meter and its operation.

Q: I have Astra-2A and Astra-2D both satellites are located at the same position of 28.2 east. Why is this?

A: Astra-2A has a Europe wide reception area and Astra-2D is focused over the UK, the Astra-2D satellite is weaker the further south you are from the UK, and this separate selection was made to assist with Astra-2 installations outside the UK in places such as France and Spain. The Astra-2D satellite carries Tv services such as BBC, ITV and Channel 4. Outside the UK larger satellite dishes will be required for the reception of Astra-2D services.

Q: I have aligned my satellite dish but still have no picture on my TV?

A: The NanoSat is an installation meter that uses unique references to acquire a lock on the required satellite and is not designed to be left in line after the completion of your installation. Once you have completed your installation reconnect your LNB to your satellite receiver.

Q: What about other satellites not in the default file?

A: More satellite packs will be added to this download page as requests are made.

Note: From time to time the satellite parameters do change we recommend that if you have not used your meter for some considerable length of time loading the latest default file will ensure reliable operation.

Software updates

From time to time it may be necessary to update the selections in your NanoSat satellite meter to ensure correct operation. Before proceeding to download the latest file below please ensure that the USB driver installation has been completed, in most instances your drivers will automatically download the first time your meter is connected to your PC. In the event that the USB drivers do not automatically download please use the driver installation package.

The link below will download a zipped .exe loading program NanoSat Default Satellites for your meter which includes Astra-2A & 2D at 28.2 east Astra-1 at 19.2 east and Hotbird at 13 east.

<http://download.horizonhge.com/include/Nano/NanoDefault.zip>

Please note the above satellite settings file is only suitable for the Horizon NanoSat for other models please the visit download pages as indicated in the instruction manual supplied with your version of meter.

For manual USB driver installation please download the CDM20802 zipped .exe file from the link below.

<http://download.horizonhge.com/include/Nano/CDM20802.zip>

To manually install drivers (if it is required) ensure that your NanoSat meter is not connected to your PC and double click the red spot icon of the CDM20802 file that you have just downloaded. Once complete connect your meter and you will be able to load the default satellites into your meter. This driver installation package is compatible with Windows 7, Vista, XP and Windows 2000. 64 bit versions of Windows are also supported.

Support

Support is available via our regular contact numbers and email addresses via the contact us page of the Horizon Global Electronics web site. The direct email for support is support@horizonhge.com

Advanced users

The NanoSat is primarily designed for use with single universal LNB satellite dish setups and operation with multi output LNB's is not guaranteed, if you are using a Quad LNB then refer to the manual for connecting one of the additional LNB ports to the receiver to provide extra power.

If you have a Quattro LNB (separate band and polarity outputs VH HH VL and HL) then use the HH port for Astra-2A Astra-1 and Hotbird, for Astra-2D us the HL port) this only applies to the default file.

Note: The NanoSat default files are not suitable for use with VSAT systems as these have different types of LNB (commonly know as block types) that have different voltage requirements and use different local oscillator values.