

Installing and Pointing a Tooway Dish yourself, using your browser.



(Updated 29th Oct 2019, using new style modem and new style tria on mid pole dish)



You'll need to know where the Tooway satellite is located in the sky so that you can choose a place on your property to install it. You will need clear line of sight to the southern sky ... the satellite is located just to the east of due south and the elevation will be between 30 and 40 degrees depending on your location in France.

First of all, you'll need a pole or bracket to mount your Tooway dish on to ... most installations use a wall bracket so fix that to your wall first. If you're using a pole in the garden, get that fixed into place and make sure it can't move.

You'll need to know the exact dish elevation and you'll get that by navigating to this site: <http://finder.tooway-instal.com> where you can either zoom in on the map or enter your postcode and commune ... either way, you'll get something like this:

tooway™
fast internet everywhere

KA-SAT FinderKa-Sat Finder

KA-SAT Finder provides essential informations for Tooway antenna installers on KA-SAT satellite. KA-SAT Finder is a GPS and maps based application. It provides spot configuration, azimuth and elevation angles according to your geographical position.

Map Coordinates

Address

Or

Latitude

Longitude

Results

Elevation

Geographical azimuth

Spot configuration

The important angle here is the Elevation so adjust your dish to that angle ... it's much easier to do this before you put the dish up on to the wall bracket. Incidentally, make a note of the spot configuration as you'll need that later.

An angle measuring app will help you, I use this free app which you can download from the Play Store, there's probably a similar app for Apple devices:

<https://play.google.com/store/apps/details?id=com.plaincode.clinometer&hl=en> EN



The dish is quite heavy so it's easier to put it up on to the wall mount in three stages so you're actually building the dish bit by bit on the wall bracket. Just follow the assembly instructions that came with the dish.

Eventually, you'll end up with a dish looking like this.



That's the dish assembled (on a pole in this case) and the elevation is already adjusted. The calculated elevation figure will only be accurate if the pole that you are mounting the dish on is perfectly vertical. That's relatively easy on a pole like this but not so easy on a wall bracket especially on old stone properties common in this part of France.



It helps if you can get the pole bit of this wall bracket vertical (washers behind the wall plate, for example) but it's not absolutely essential. If the pole bit was 2 degrees out towards the south, you would adjust the calculated elevation angle by 2 degrees. In other words, treat the calculated elevation angle as a good starting point but be prepared to alter it if your pole is not quite vertical.

If you have the clinometer app installed on your phone, then position the phone on the back of the dish in the position shown below ... adjust the dish elevation bolt until the calculated elevation matches the reading on the phone.



Once your dish is on the pole, tighten the two pole clamps just so that the dish can still be moved by hand but not so loose that it slips down the pole:



Now connect the satellite cable to the tria and the other end of the cable to the modem inside.

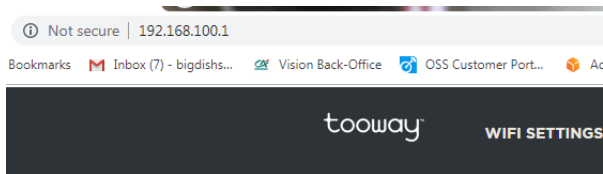


Connect the modem to the mains and you'll see the modem light come on ... it will be solid white to start with and then it will start pulsing. That means the modem is looking for a satellite signal so we now start the dish pointing process.

You can either connect a device directly to the modem with the supplied Ethernet cable or via wifi ... the modem's network name and password is on a small label on the side.

Once you are connected to the modem, open up your browser (ie Chrome, Firefox etc) ... and you'll probably get a message to say there is no internet. In the address bar of your browser (not the search bar) type in <http://192.168.100.1>

That will bring up the modem status page which is actually inside the modem ... you will see three boxes which represent the modem, the cable (called IFL) and the tria. The cable and tria should have a green tick but the modem won't have one just yet.



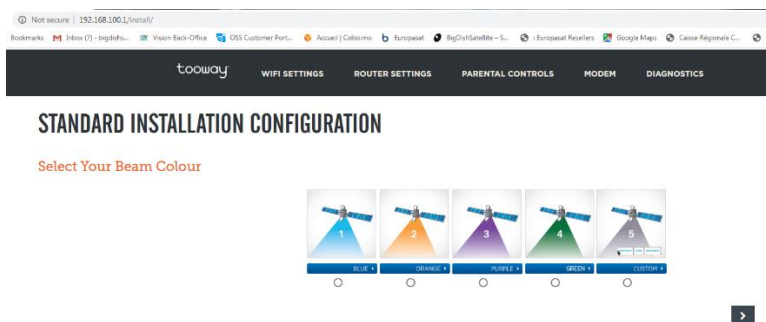
BASIC STATUS

General

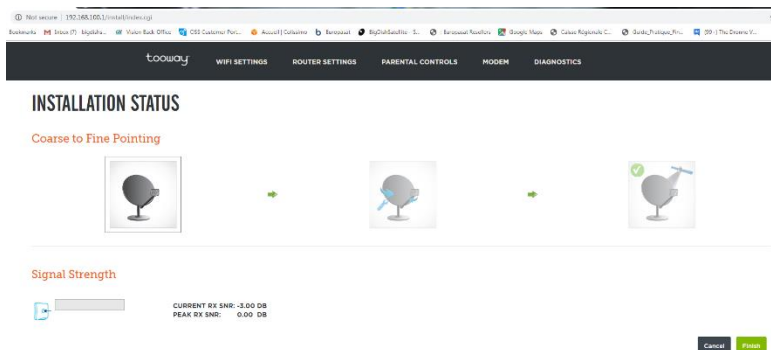


A red exclamation mark would indicate a fault, if you see one, check the connections on the end of the cable (remove power from modem first)

In the address bar of your browser, enter <http://192.168.100.1/install> and this page will appear:



Tick your beam number ... that's the spot configuration that you made a note of earlier. Then click on the right hand arrow and you'll see this page:



At the same time that you see this page, the tria on the dish will start to beep and you're ready now to start pointing the dish.

You have already adjusted the elevation to the calculated figure and your dish should be able to move side to side on the pole ... not too loose and not too tight. You need to know roughly where the dish has to point, you don't need a compass but you do need to know where south is. The dish has to point a little bit to the east of due south.

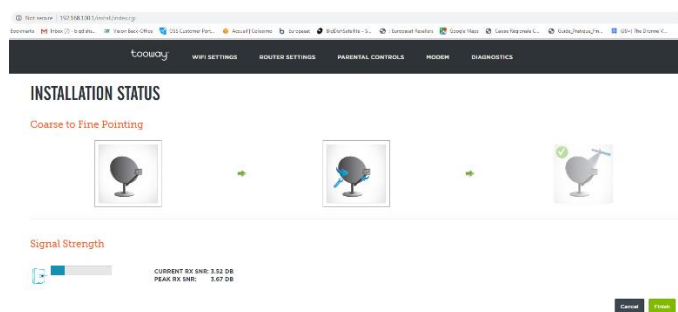
The tria is beeping like a heartbeat ie beep-beep beep-beep beep-beep that means that it hasn't found the satellite signal yet. Slowly start to turn the dish with your hands, you need to be behind or to the side of the dish, not in front.

If the elevation is correct, the satellite signal will be found and the beep-beep on the tria will change and momentarily sound like a telephone ringing. The tria will then start beeping to indicate that it's in fine tuning mode ... beep...beep...beep...beep...beep...

If your dish doesn't find the satellite straight away (and it probably won't) then it usually means that your elevation is not quite right or there is an obstacle in the way. Assuming that nothing is in the way, alter your elevation by half a degree and then do the slow turning of the dish by hand. Keep altering the elevation by half a degree and the dish will eventually find the satellite signal.

Once the dish has found the satellite signal, carefully tighten the four nuts securing the two pole clamps ... you don't want to lose the fine tuning beeps. Once the pole clamps are tight, the dish can no longer move on the pole by hand and you're ready to start the fine tuning.

If you nip back inside and have a look at the screen, you should see something like this:



In this case, there's a signal of around 3dB so the coarse tuning has worked and we're now going to fine tune the dish to get that signal into double figures.

So, return to the dish and start turning the fine tuning azimuth bolt ... that will very slowly turn the dish left or right depending if you turn the bolt clockwise or anti-clockwise. As you start turning the fine tuning azimuth bolt (picture below), the signal will either increase or decrease ... the pitch of the tria beeps will lower when the signal decreases and will get higher if the signal increases. If you hear the beeps lower in pitch, stop turning and turn your spanner round and start turning the other way.

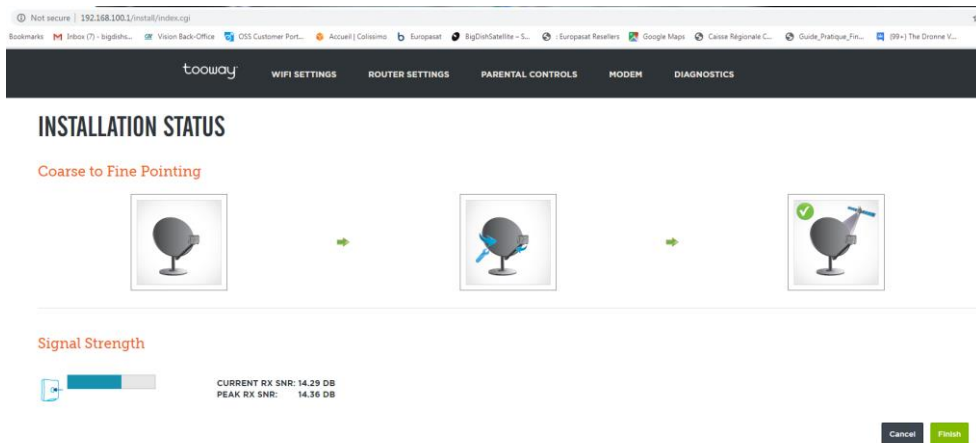


As you turn the bolt, the pitch of the beeps will get higher and higher and will eventually turn into a continuous high pitched tone. The signal from the satellite is getting stronger and stronger. When you hear the continuous tone for the first time, don't stop turning the bolt ... carry on turning until the continuous tone turns back into beeps. Stop turning straight away, it means that you've just gone past the strongest signal so turn your spanner around and turn slowly the other way. As soon as the continuous tone starts again, stop turning ... you've finished the azimuth fine tuning.

The next step is to fine tune the elevation. It's easier if you reset the modem and you can do that by going back to the screen and click on the left hand button a couple of times to return to the page where you tick your spot beam colour. Just choose the spot beam as before and then click on the right hand arrow ... outside, the tria will ring like a telephone again as it's already found the satellite and will go straight into fine tuning mode with the beep...beep...beep...beep ...

Now apply your spanner to the elevation bolt ... this is the one that you have already used to set the elevation right at the start. Start turning either clockwise or anti-clockwise, if the pitch falls stop turning and go the other way. If the pitch increases, carry on until the beeps get faster and eventually turn into a continuous tone. As before, carry on turning until the continuous tone changes back into rapid beeps. Stop straight away and turn the other way until the continuous tone returns indicating that the elevation fine tuning is finished.

Go back to your screen and check your signal, it has to be greater than 10db in order to pass the quality test but it's usually around 12dB or higher depending on your location and weather. The higher the signal, the better ... it means that your system will carry on working when it rains.



Once you're happy with the signal, go back to the dish and tighten the lock nuts, there are two for the elevation, left side and right side and there are two for the azimuth, top and bottom.

Go back to the screen and click on Finish and that will silence the tria and your modem will then synchronise with the satellite ... eventually the light on the modem will turn solid blue meaning that it's time to activate it. You can close the installation page down on your screen and type in the link for the activation page <http://selfact.skylogic.com/> and you'll see this :



Click on Start Activation. The signal and current software are then tested. The software is usually out of date so a software upgrade will have to be done ... just click on Continue. The software update can take 15 minutes or so, on the screen is a message saying don't interrupt the update.

Once the software has been updated, the activation screen will re-appear and you can proceed with the activation process and this is where you enter your activation code:

selfact.skylogic.com eutelsat

UK DE IT ES

SELF ACTIVATION

Step Account Activation

Account Information

Insert your activation key
e.g. 123-ABCD1234

✓ Save

12/08/2017 08:20:25 UTC

After you have entered your activation code and clicked on Save, you will get a message on screen saying that your activation has been successful. Then, your modem will reboot and five minutes later you will be on line.