

Mikrotik Light Dish Feed on Sat Dish Install Experience:

By Bob Pestolesi KE6GYD (Ver 1.0 2021-3-22)

Installing the bracket for the LDF:

I used an abandoned dish that had a tri-feed LNB device. I removed the LNB and purchased a bracket for the LDF.

I modified the end of the arm to get a flat surface by removing part of the reinforcing band and drilled and filed a slot to mount the LDF bracket.



I placed the bracket close to the same position and angle as the original LNB.

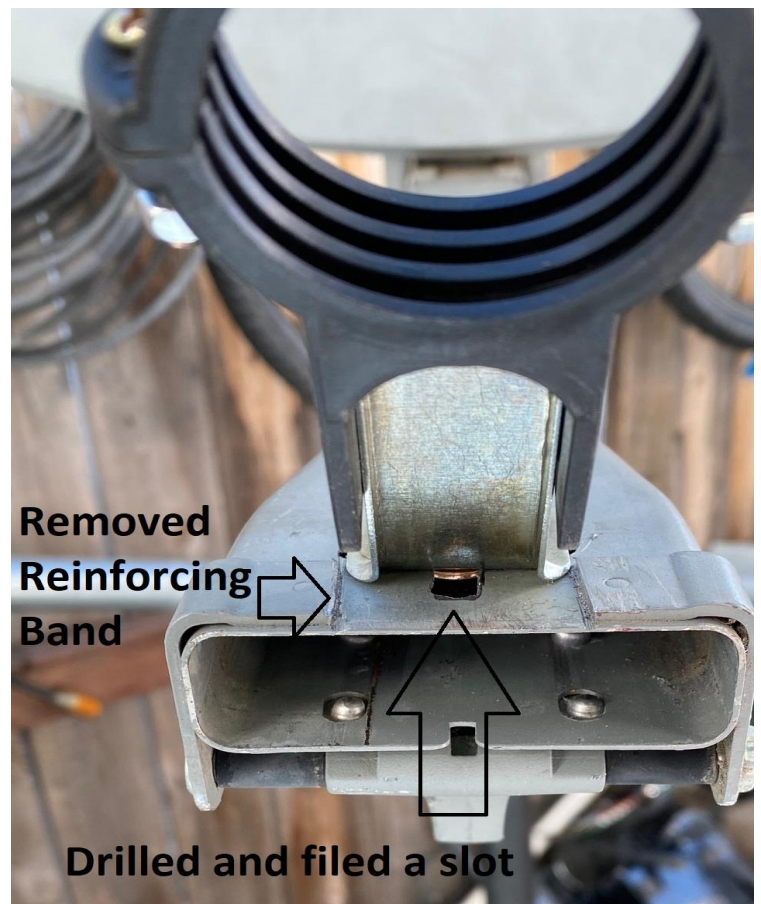
Here is the link for the bracket.

https://www.amazon.com/gp/product/B074L85WK2/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1

I tried another less expensive bracket but this had the angle needed and greater adjustment choices.



I then mounted the LDF in the bracket. My next step was to mount the dish on a tripod speaker stand. See next page.



Testing and Adjusting:

I went to a location with a clear view of a network node on a hill that was a few miles away. I compared a 25dB gain Nanobridge 5G25 to the LDF in dish. I aimed the Nanobridge at the node to get a reference SNR then turned it off. *(It's important to only have one node on at a time on the same channel when they are next to each other to avoid false signal strength readings.)*

I booted and aimed the Dish at the node. At first, I could not get a signal. Then I played with the angle a bit more and finally got a signal when I tilted the dish well below the horizontal--much lower than one would think. I also used a bag filled with gravel that is used to weigh down photographer backdrop stands in order to prevent the tripod from tipping over as the dish bracket would not adjust to the needed angle. See picture at upper right.

Once I got a signal, I adjusted the LDF in the bracket to try and find the best focal point. I moved it up/down and front/back to get the best SNR.

I was able to get about 5dB more gain with the Sat Dish/LDF than the NanoBridge. More fine tuning of focal point is needed.

I have now modified the dish mount by using the curved tube that came with the dish. Now, it's tilted down at an angle more in line with nodes on the horizon.

I also needed to use a sleeve made from conduit in the bracket clamp for the tube I had. My tube happened to slide perfectly over the speaker stand tube. Your tube may work without the sleeve but may need some sleeve on any stand.

To the right is the finished product. It would be better suited for a permanent installation. It's a bit unwieldy for portable use unless the extra gain is needed.

