## **DISH SETUP INSTRUCTIONS**

1. The satellite dish will look like this when completed.



2. First, select a roomy working location and lay out all your parts and pieces for easy identification. Don't worry about all the parts; there are some that won't be used at all.



3. Take the feedhorn assembly (the large metal coffee can) and attach each of the three dish arms with the allen bolts provided on the feedhorn collar and a nut on the back side. Finger tighten (do not use a wrench to tighten). Make sure that the coffee can opens in the direction that the arms are pointed (they should attach as shown here).

3 FOOT DISH



4. One of the three bolts for the feedhorn arm will screw into the collar differently (without a nut). It is shown here.



5. Gently set the feedhorn assembly aside. It will look like this



6. Gently lower the back side of the dish onto the ring-shaped dish frame. Note how the flanges meet as shown here.



7. Use the two 2-centimeter bolts shown here to attach the flanges. You will also need a matching nut and two washers.



8. Finger tighten only (don't use a wrench).



9. Be careful not to raise the dish too high! If you force it upward the dish will strike the frame, and with enough force it will be bend itself out of shape. This will void the warranty.



10. Take the large square-shaped arm and put the smaller arm (the one with the markings) inside. Holding the part of the tube with the welded nut upward, you should see the graduated scale's numbers go down, not up, as you pull the smaller tube upward out of the larger tube. Make sure the welded nut on the larger arm is on the side of the graduated scale, as shown here, not on the front or back. The welded nut is on the palm of the hand seen here.



11. Screw the handscrew into the welded nut. Do not tighten.



12. Attach the large arm to the flange on the dish frame using the largest (4-centimeter) bolt, a washer on each side, and a nut.



13. Likewise, attach the smaller arm to the flange on the dish itself. Use the medium size (3-centimeter) bolt, two washers, and a nut.



14. Carefully place the feedhorn assembly on the dish (have someone hold it for you if possible).



15. Secure each feedhorn arm to the dish using the small bolts, each having one washer and one nut.



16. Congratulations! The dish is now assembled. Tighten all bolts/nuts, taking care not to overtighten them. You may have parts left over since the package uses a combination of pieces from different manufacturers.



17. Attach the coaxial cable to the feedhorn's LNA (low noise amplifier), which is the silver box. You can run this cable along the feedhorn arm and secure it using a plastic tie (provided).



18. Adjust the elevation of the dish by holding the dish and using the handscrew to release tension and apply tension again when at the proper elevation. The numbers indicate the elevation of the dish in degrees. They are only a rough guess; you will have to fine-tune the alignment of the dish as described elsewhere in the guide. Also adjust the azimuth by turning the entire assembly to face the desired direction. You can use sandbags draped over the dish frame to secure the dish.



19. One of the other things you will have to adjust is the polarity. Use the allen wrench to loosen the coffee can (feedhorn) from the collar. You can then rotate the coffee can to change the polarity. It may take some force to turn the can; be careful not to damage the assembly in doing this. Also be careful never to overtighten the collar bolt shown here as it will warp the feedhorn. Tighten just enough to keep the feedhorn from rotating.



20. The polarity is described in terms of the position of the LNA box when viewed head-on. Here the LNA appears at the 1 o'clock position, therefore the dish's polarity is 1:00 o'clock. This should be used for the western U.S.



21. In this position the polarity is 11:00 o'clock. This should be used for the eastern U.S. In the Central U.S., use a setting in between.