

## Target: Sat and Cradle assembly to Tripod

- Place Target: Sat between two halves of cradle in holes that match Target: Sat angle levels.
- Insert threaded brass rod through one side and into threaded side of other half of cradle.
- Attach base of cradle now to tripod disk using 3, 3/4" long stainless socket head bolts provided.
- Attach sides of cradle to cradle base using 4, 3/4" length socket head stainless bolts provided into brass inserts in cradle base.
- Attach thumb knob and washer to side of cradle. This provides resistance to movement of Target: Sat within cradle walls. This will increase movement or decrease movement through each part of angle adjustment position of Target: Sat.
- BEFORE ATTACHING Target Sat and cradle assembly to tripod, Follow this procedure.
- Level tripod at location by inserting bubble disk into tripod.
- Now level tripod by centering bubble of bubble disk in center circle of bubble disk. This is accomplished by tripod leg adjustment on tripod.
- Once tripod is level, remove bubble disk from tripod and now attach Target: Sat with cradle installed on tripod disk into hole in center of tripod.
- Now attach the 5/8" bolt in the tripod to the base of the Target: Sat cradle and tripod disk assembly and slightly tighten bolt so that fine movement is noticed when attempting to rotate cradle with Target: Sat in either east or west azimuth movement .VERIFY that tripod disk fits flush with tripod surface .
- Verify that tripod remains level by viewing Target" Sat bubble encased within Target :Sat . The bubble in the center of bubble vial in Target: Sat should remain in the center of the vial as you rotate the unit from east to west . If not, remove the cradle assembly and adjust tripod to level again.
- Now that this is accomplished you are now ready to align Target: Sat with Satellites using the Spacecraft Targeting platform on the website [www.alienworksltd.com](http://www.alienworksltd.com)

- Once Target: Sat and cradle are installed on commercial tripod , go to the website, [www.alienworksltd.com](http://www.alienworksltd.com)
- Click on the button that is named spacecraft targeting.
- Enter your user and password in all lower case letters in the blanks provided.
- Select either USA and Canada or International depending on your site location.
- Enter the satellite orbit degree position of the satellite in the satellite location box.
- Enter your zip code in the zip code box then click the red engage button beneath it. An information work sheet will return and will provide you with all the coordinates needed to align Target: Sat for viewing that satellite 's position. Then click print work sheet below and then print a copy for taking to the site location.

#### Alignment of Target: Sat

- Align Target: Sat and cradle in the following manner;
- Rotate Target: Sat and cradle in an azimuth direction until alignment pointer line matches the compass reading of 180 degrees South.
- Align azimuth dial so that 180 degrees South on it matches pointer line and compass South position.
- Adjust declination slider to degrees given on the chart in your manual for your latitude.
- Rotate azimuth dial away from the 180 degree position on pointer and compass the number of degrees given for magnetic variation from your work sheet. The direction is either east or west.
- This step corrects the reading to true heading.
- Rotate pointer to the number of degrees on the azimuth dial of the azimuth of satellite's location given from your work sheet.
- Tilt Target: Sat in cradle back so that the angle on the angle finder matches work sheet. This angle is your latitude plus .5 degrees subtracted from 90 degrees.
- Viewing through the declination slider end toward the viewing lens on the other side of the pointer , align your eye with the dot on the slider so that it's position falls in center of cross hairs of viewing lens . This is the space craft's actual position form your site location.
- Obstructions seen through this lens will reduce the strength of the Satellite signal.