



Setting up the SG2100 Positioner

- 1 Note: It is sometimes easier to fit the dish to the mover before fitting the mover to the pole. Check that the dish is facing exactly the same way as the zero mark on the dish mover. Then make a mark on the dish mover shaft, and the dish mounting hardware with a permanent marker (see red mark in picture below). Now remove the dish.

Later when you come to step 5 you will know exactly where the dish should be fitted. This will also help with step 6 as setting the dish elevation can make the dish move side to side. You will however be able to check easily that it is exactly where it should be by comparing the mark.



- 2 Make sure the mounting pole is perfectly vertical. Even if your pole is already setup, check it with a spirit level as this is very very important.
- 3 Use our website page www.freetv.co.nz/DIY.html to find your latitude. Go to page 7 in the User Manual and select your latitude from the list. Mark your latitude on the table. Fit the dish mover to the mounting bracket at your latitude as shown on the scale (see picture below). Be sure to use the latitude scale and not the elevation scale. Check that the marker points to the exact latitude for your site. Do the bolts up tight as this is never changed again.



- 4 With the dish motor Azimuth on Zero (It is on zero when supplied) fit the dish mover to the pole facing **true north** using a compass .(True North is magnetic north minus 22 deg, this works out to 338 deg compass.) Do the bolts up, but you will move this again in the last step.
- 5 Fit the dish to the dish mover and also have it facing **true north**. On some dishes you will need to bend the mount tab out of the way to slide the dish onto the motor shaft. This is where step one may help, you can just fit the dish to the mark you put on the mover and dish mount.
- 6 Set the elevation on the dish to the elevation as per the “Dish Bracket Angle” on page 7 of the User Manual. Remember to use the setting for your latitude. You marked it in step 3. The adjustment for this elevation is on the dish not the mover (see picture below).



- 7 You can fit the extra bolt supplied to the hole in the motor shaft below the dish clamp to stop the dish sliding off while the clamp is loose . Remember the dish and motor need to be in a straight line to **true north**.
- 8 Set the LNB skew about 10 deg clockwise to start. That means when you are looking into the dish, at the back of the LNB, the LNB cable connector should start facing down as though to 6 o'clock. Now turn the LNB in it's mounting bracket 10 deg clockwise, or until the connector is facing about the 7 o'clock position.
- 9 The receiver USALS (the name for the dish mover controller program) has to be enabled in the menu and you need to enter in your site location .(ie Hamilton is 175deg east longitude and the latitude is 38deg south).If the receiver has been programmed for the satellite positions already, now use the receiver to move the dish to a known satellite (example Optus B1 160 deg east)
- 10 When the dish motor has moved to the Optus B1 position then using a satellite meter adjust the Azimuth by moving the entire setup. ie Both the motor and dish together. Elevation fine tuning is done by changing the dish elevation (as per step 6) for max signal. Do not change the motor elevation. Tighten all clamps and check the LNB skew for best reading on the meter. All the satellites will now be found automatically.
- 11 Use our website page www.freetv.co.nz/DIY.html to download more information about installing your own satellite dish.