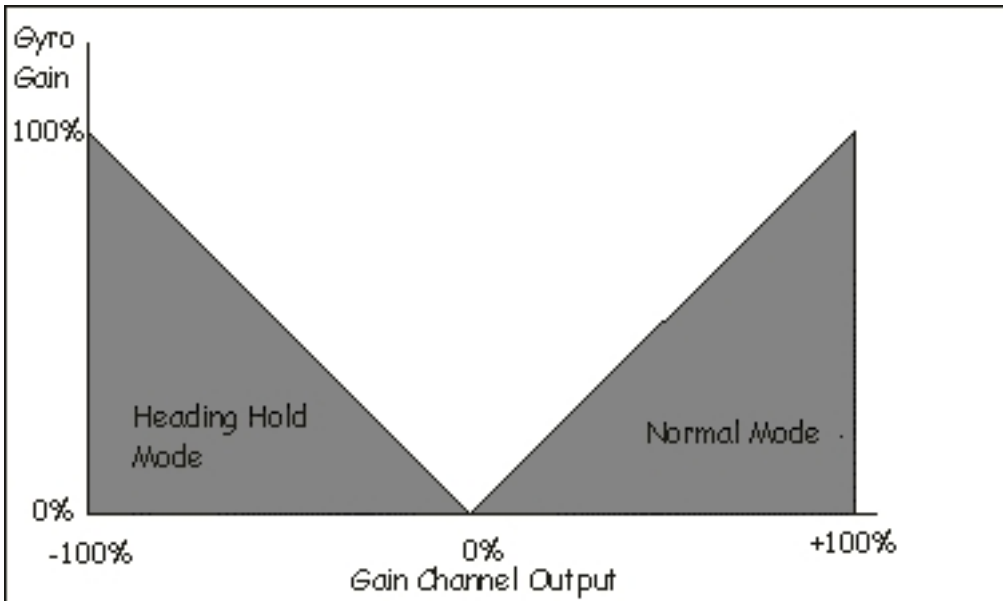
Heading hold Gyros are different from standard gyros in that standard gyros are just rate dampening devices they only resist movement including movement you input from the rudder stick. Heading hold gyros are rate on demand devices which moves the tail at the rate you tell it by moving the stick. When the rudder stick is neutral, the tail is locked into position. Gusts of wind or power changes will not cause the tail to move. For this reason, tail mixing is not required. In fact you can not use tail mixing at all since this would be interpreted by the Gyro as a tail command and the helicopter would start to pirouette.

Therefore, the first step in installing a heading hold gyro is to remove all tail revolution mixing. Make sure you do this in all flight modes. Next you should make sure all trims, sub trims, stunt trims, and trim offsets are all set to zero. You should also set the rudder ATV's to 100%. Most Heading Hold Gyros have both normal and heading hold mode. The modes are selected by different gain levels. -100% gain is usually maximum heading hold gain and +100% is maximum normal gain. See chart below. You should connect the gyro gain input to an aux channel that has a switch and then program this switch to -100% and +100%. You tell which mode your in by looking at the tail movement. If you move the rudder stick and then release it and the tail returns to center then you are in normal mode. If on the other hand the tail remains at the extremes or just does not center then you are in heading hold mode.



The next step is to trim the tail. This is done by switch the gyro between normal and heading hold and then watching the servo. Place the gyro in normal mode to center the tail servo. Now

switch to heading hold and note the servo movement. If the servo moves from center then add a bit of trim and try again. If the movement gets worse then you went the wrong direction. Keeps adding trim until you can switch from normal to heading hold without the tail servo moving. It should remain neutral for at least 30 seconds. It may slowly drift after this but that is normal. Now try and fly the helicopter in heading hold mode. If tail may need a little further trimming so perform that here. After that you can not touch the trim. If you find the helicopter does not track in normal mode you must mechanically trim the tail. Do not use the trim tabs as this will but the heading hold mode out of trim.

As mentioned the heading hold gyro is a rate on demand device. If you find the pirouette rate is too high then you want less demand. This is accomplished by reducing the travel adjustments or ATV's on the rudder channel.

One artifact of this setup is that a lot of trim may be required to trim the Heading Hold mode. This trim can cause less rudder travel in one direction than the other. The end result will be different pirouette rates to the left or right. To counteract this you will have to increase the ATV setting in the direction of the slower pirouette.