11 Gyro Setup Using the USB Interface

Note: The PC Setup Software has built-in Wizards to guide you through these set up steps as a first-time user. We suggest that you set up your helicopter the first time by following the step-by-step instructions in the Initial Configuration Wizard, Swash/Cyclic Setup Wizard and Tail Setup Wizard. Using the Wizards will make initial setup of your SK720 much easier and will help you learn how to use the PC Setup Software.

CAUTION: Do not connect the swashplate or tail servos to the gyro until after the SK720 has been set up for your servos. Your servos could be damaged by an incorrect configuration.

Step 1: Connecting

- Start the SK720 setup software on your PC. See Section 7 of this manual for instructions on how to install the setup software on your PC.
- Set your radio’s transmitter so Aileron, Elevator, and Pitch (Collective) are output each on a separate channel (“Normal” or “1-Servo” swashplate mode on Spektrum/JR transmitters or “H-1” mode on Futaba transmitters). Also centre all the trims and subtrims.
- The initial setup will be easier if you use a straight-line pitch curve and no expo or dual rates in your radio. These features can be set up later according to your usual preferences.
- Connect the SK720 to your PC using the included USB cable. The SK720 setup software will automatically detect that the gyro is connected to your computer. Check that the connection indicator in the upper left is green and says Connected.
- Good starting points for the cyclic and tail gains can be found in the “Default”, “Scale” or “Basic3D” setups, all of which are included with the PC setup software. Look for these default setups under the SK720 setup software’s File menu.

WARNING: Do not use any of the “Default”, “Scale”, or “Basic3D” setup files mentioned above without first modifying them to suit your helicopter per Section 11, Steps 2 through 5.

Step 2: Match the Gyro to Your Transmitter

- Click the Control tab in the Offline Setup Values area in the lower half of the setup software window (see Figure 11.1 below). Select the type of receiver that you will be using by choosing one of the options in the Type box.

![Figure 11.1 – Selecting Receiver Type](image)

- Click the Send Setup button or press the F1 key to set the changes on the gyro. You must SEND the setup whenever you want to test changes.
- The SK720 will automatically reset itself any time you change the receiver type and then press the send setup button.
- Try moving the elevator stick towards you (nose up) and look at the Elevator field under the Inputs From Receiver area (circled in Figure 11.2 on the next page). The number displayed should be close to 100% and should be shown on a green background when the transmitter’s control stick reaches its stops. If it is negative and displayed on a red background, reverse that channel in your radio.
- If it’s too low or reaches 100% much before the stick’s limit, adjust the endpoints (ATV’s) for that channel in your transmitter. Typical end point (ATV) values will be near 125% for JR/Spektrum radios.

WARNING: All the control input and sense directions set up in Steps 2 through 5 below must be correct or your helicopter will instantly crash if you try to fly it. Follow these steps carefully and complete the pre-flight check outlined in Section 13 of this manual before flying your helicopter.