MKS GY-292 gyroscope operation instructions

The following is an independently rewritten manual for the MKS GY-292 Gyro

GY-292 Head Lock Gyro Specification：

◎ Input Voltage：DC 4.2 – 7.2 V
◎ Current Consumption：33 mA
◎ Operation Temperature：-5℃ to 60℃
◎ Dimension：20 x 20 x 10.5 mm
◎ Weight：7 g

Gyro Function：

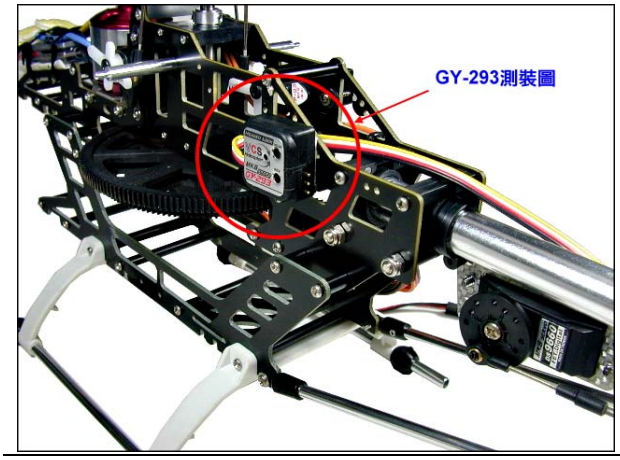
◎ Dual-rate Adjust Mode : Heading Hold/Head Lock and Standard/Rate Mode
◎ The physical volume is small, Weight is light
◎ Dual-rate remote control via spare servo channel
◎ 4 CH setting by VR1 when Gain channel not connected
◎ Reverse setting via Dial on Gyro
◎ Gain Dial on Gyro used as Limit setting when Gain Channel connected

Mechanical Installation：

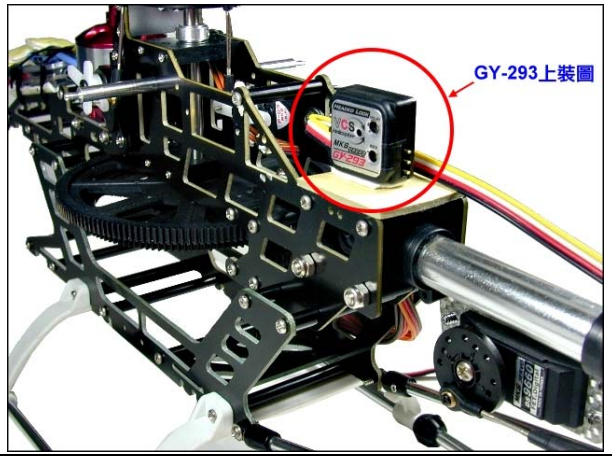
（**1**） Mount Gyro on the helicopter. Mount sideways so that Label is facing Left, Right, Forwards or Backwards of helicopter. DO NOT install with Label facing Up or Down.

（**2**） Do not install in the gyro near the muffler of a Nitro Helicopter. Avoid direct heat from Engine or Muffler to Gyro.

MKS GY-292 Fig.1 (side install)



MKS GY-292 Fig.2 (Top install)



（**3**） Connector mode：

Step A：Rudder servo connects to Gyro

Step B：Insert GY292－3 Pin connector to receiver (FUTABA is CH4，JR is RUDD)。

Step C：Insert GY292 ,GAIN 1 Pin connector to the receiver，FUTABA is 5CH, JR is AUX2 or AUX3， Connect to receiver sensitivity switching channel。

（**4**） Gain Plug should be connected so that single wire is connected to the servo signal pin.

Set-up and installation of Gyro using gain Channel connected (6Ch Setup)

（1） For Safety Reasons, Disconnect Motor of Helicopter during Installation and test.

（2） Turn on the power to Transmitter

（3） Set Gyro Gain on Tx to 40% initially for each direction of Channel switch for Gyro Gain on Tx (Using Endpoint/ATV mode initially)

（4） Set Helicopter Tx setting to Heading Hold Mode (If Known)

（5） Turn on the power to the Helicopter

（6） Turn on the power of receiver on the Helicopter. Before Gyro LED light turns red,do not move Gyro and helicopter (about 7 seconds),This will influence the set-up.

（7） Gyro MUST initialize in Heading Hold mode, not Rate Mode, If Light flashes 4 times a second, That indicated Gyro is initializing in Rate mode and will not continue until you switch to Heading Hold Mode. If so, switch to Heading Hold mode and Gyro will finish initializing.

（8） Use the Gain dial on the Gyro as a Servo Limit adjustment. Set Gyro gain channel switch on Tx to Rate mode. While moving the tail still full left and right, adjust the gain/limit dial on the Gyro so that the tail slider on the Helicopter does hit either far end and bind.

Light Table：

Light Display	GY292 Status
LED ON	**Enters to lock a mode**
LED OFF	**Entering the initial or power supply close (about 7 second)**
Fast flash	**Did not enter lock mode on Startup**
Slowly flash	**Gyro not receiving signal from Rx. Verify Tx is turned on**
Flash two times	**Tail Rudder signal from Rx is indicating movement**

Adjustment before operation

（1） In lock mode, the Servo will move to one side when moving the Tail stick then stay there or drift.

（2） If Tail is drifting in Lock mode, use tail trim to get tail servo to not move when stick is still. Trim out tail in flight.

（3） On initial flight, Adjust Tail servo position on the tail back and forth so that the tail is not spinning where you centered the tail trim during Heading Hold mode.

（4） Increase gyro gain on Tx until desired holding power is reached or Tail wags. If Tail wags, reduce Gain about 10% and test fly. Decrease Gyro gain if Tail is wagging.

（5） Changes in Headspeed or other tail characteristics may facilitate need to change the Gyro Gain.