3GX
ALIGN
3G
Compact
(Language)..
3Axis
MEMS
12bit
S.BUS
Easy
Energy
Stable
GOV
280Hz
RoHS
19:27
24/07/2011
EN

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

This program will guide you through the connecting and setup
process of the 3GX system.
Setup pages can be selected by clicking the tabs.
After performing the instruction
displayed, proceed to the next page
by clicking on the NEXT button.
Click on the BACK button if you

Back | Next

3GX

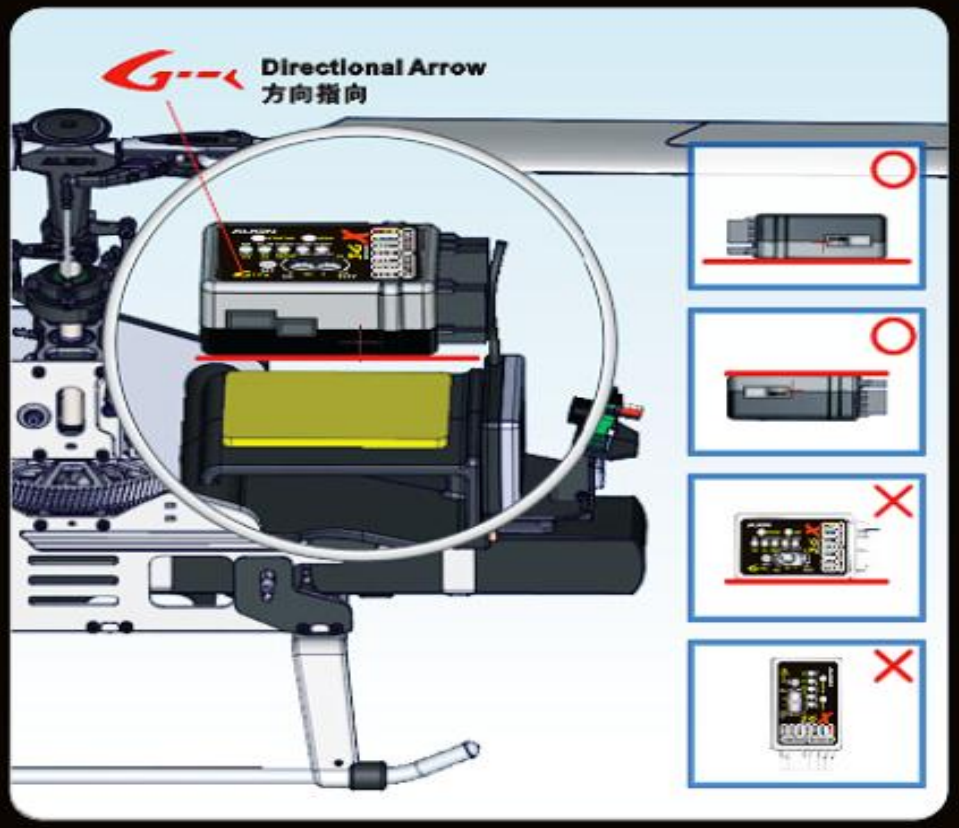
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

3GX installed in the helicopter position | Standard Receiver Connectivity Method | Futaba S-Bus Connectivity Metho

Installation Instruction

1. Consult the following diagram for 3GX installation direction, with arrow pointing toward nose or tail of helicopter. 3GX needs to be mounted flat on gyro mounting platform, away from vibration sources.
2. Two pieces of foam mounting tape can be used if helicopter experiences vibration induced flight instability. However, if this still doesn’ t cure the problem, please check the



Back | Next

3GX

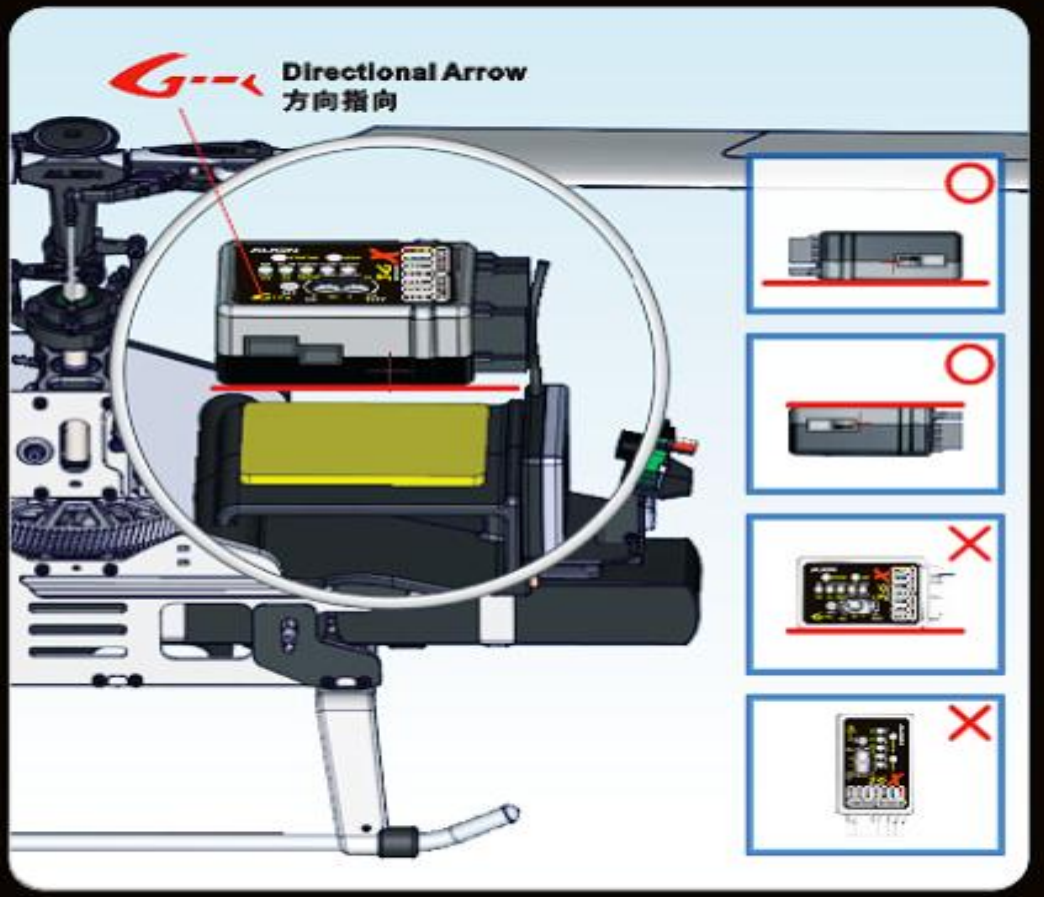
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

3GX installed in the helicopter position | Standard Receiver Connectivity Method | Futaba S-Bus Connectivity Metho

problem, please check the helicopter mechanics and minimize mechanical vibrations, or reduce the head speed.

3. Please secure with genuine factory issued double sided anti-vibration mounting tape.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

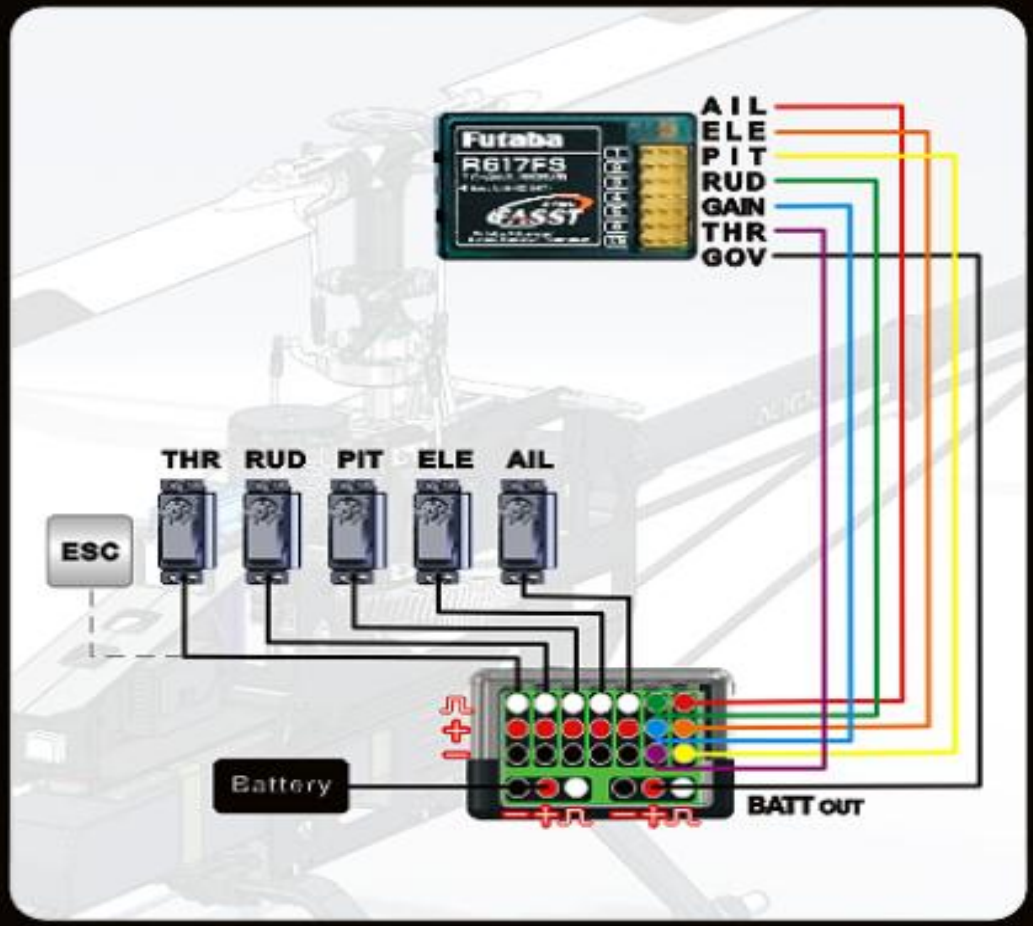
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

3GX installed in the helicopter position | Standard Receiver Connectivity Method | Futaba S-Bus Connectivity Metho

Installation Instruction

1. Connect all wires as shown in diagram. Receiver and 3GX wires are color coded to distinguish the different connection channels. Care should be taken to ensure proper wire color to channel connection.
2. Receiver power is achieved by connecting the 3GX "S.BUS/BIND" port to the ch7 or BATT port on receiver using supplied signal wire.

Caution：The battery must be directly connected to the input



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Mor

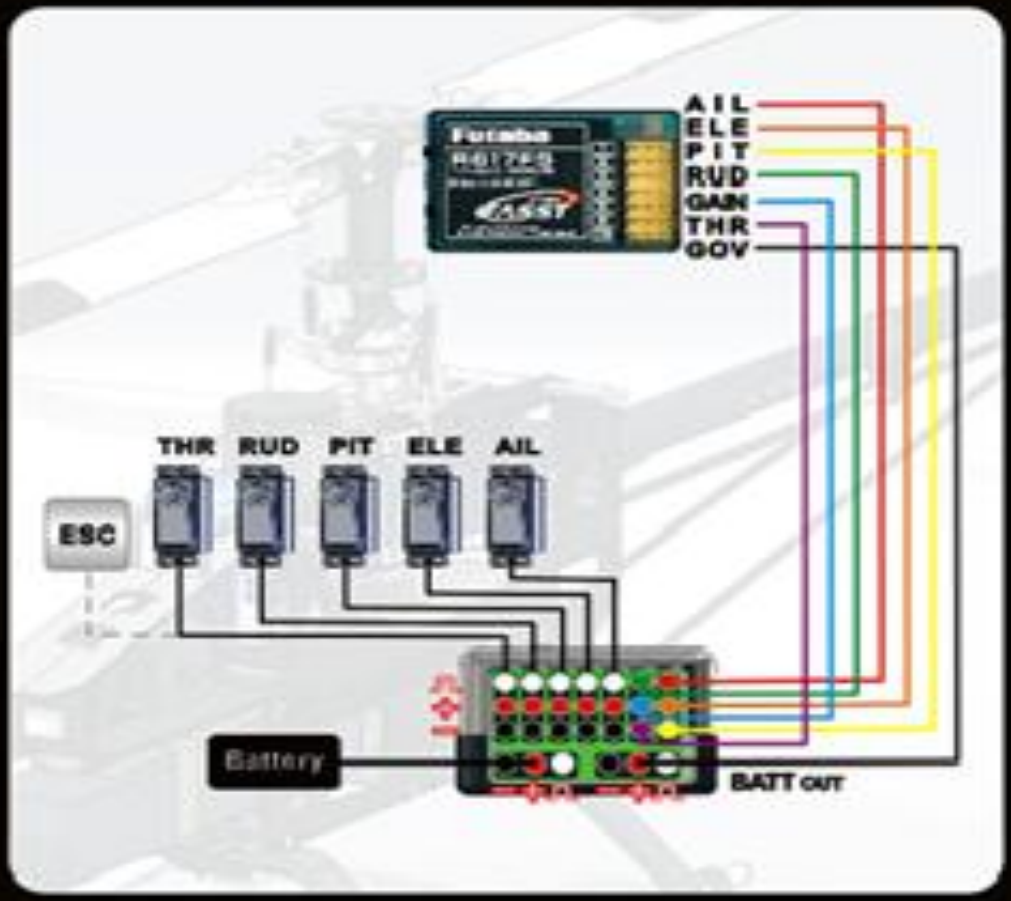
3GX installed in the helicopter position | Standard Receiver Connectivity Method | Futaba S-Bus Connectivity Metho

Installation Instruction

of 3GX to ensure the adequate power of the servo. Please supply the .receiver via 3GX Batt out

3. .To avoid damage to servos, only digital servos should be used for swashplate .

4. 3 GX has built in speed governor function which can be utilized by purchasing the optional speed sensor. Governor setting is done through channel 7 on the receiver.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

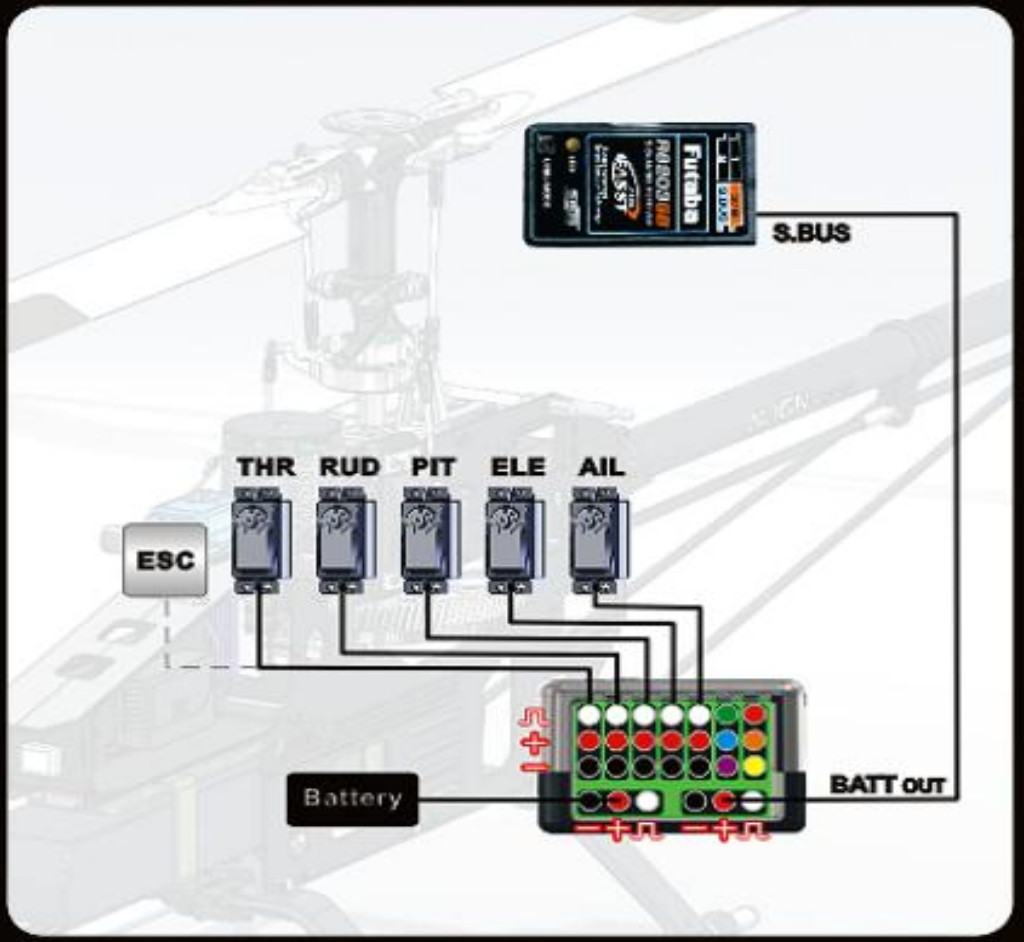
Standard Receiver Connectivity Method | Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Me

Installation Instruction

1. For Futaba S.BUS receivers, connect wires as shown in diagram.
2. Receiver power is supplied through S.BUS signal wire connected to 3GX' s "S.BUS/BIND" port.

Caution：The battery must be directly connected to the input of 3GX to ensure the adequate power of the servo. Please supply the receiver via 3GX Batt out.

3. The default channel/function mapping



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Standard Receiver Connectivity Method | Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Me

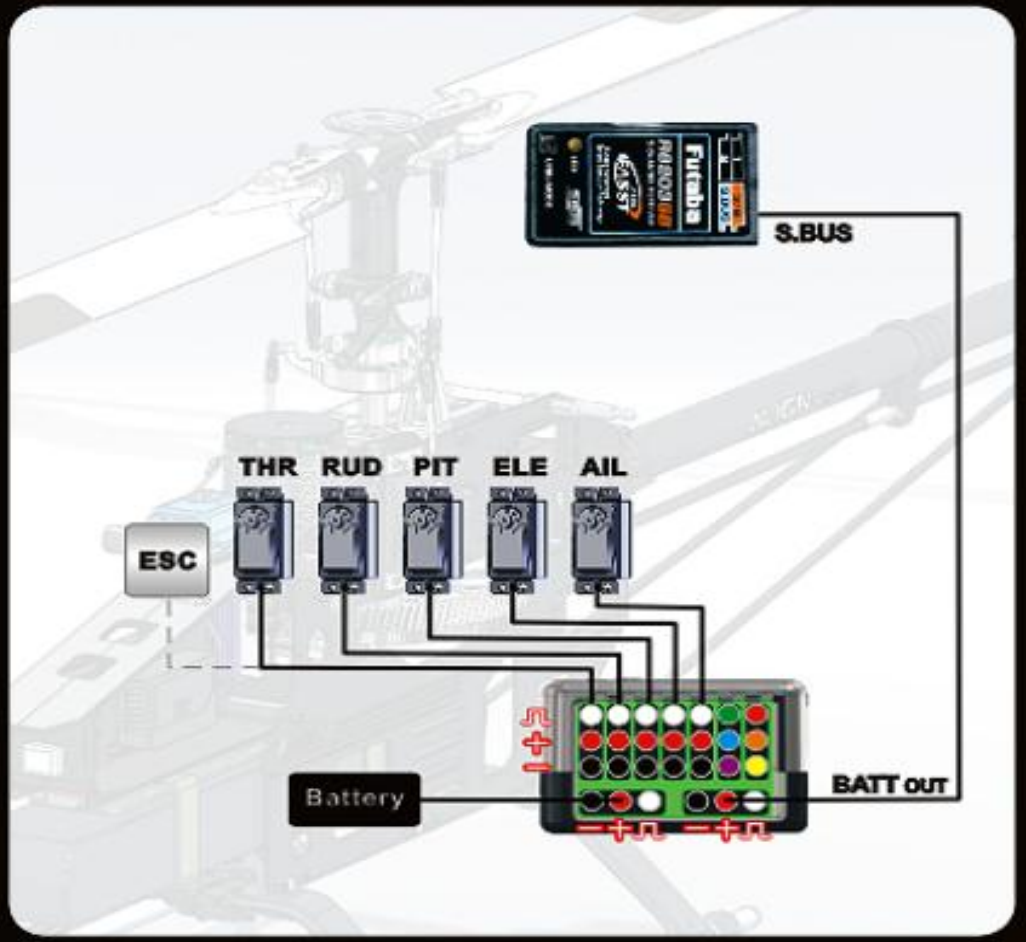
when using S.BUS are:

(1)AIL (2)ELE (3)THR(4)RUD (5)GAIN (6)PIT (7)GOV

If channel 3 is set as PIT and channel 6 set as THR on transmitter, please reprogram the transmitter to utilize channel3 as THR and channel6 as PIT .

4. To avoid damage to servos, only digital servos should be used for swashplate .

5. 3GX has built in speed governor function which can be utilized by purchasing the optional speed sensor. Governor setting is done through channel 7 on the receiver



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

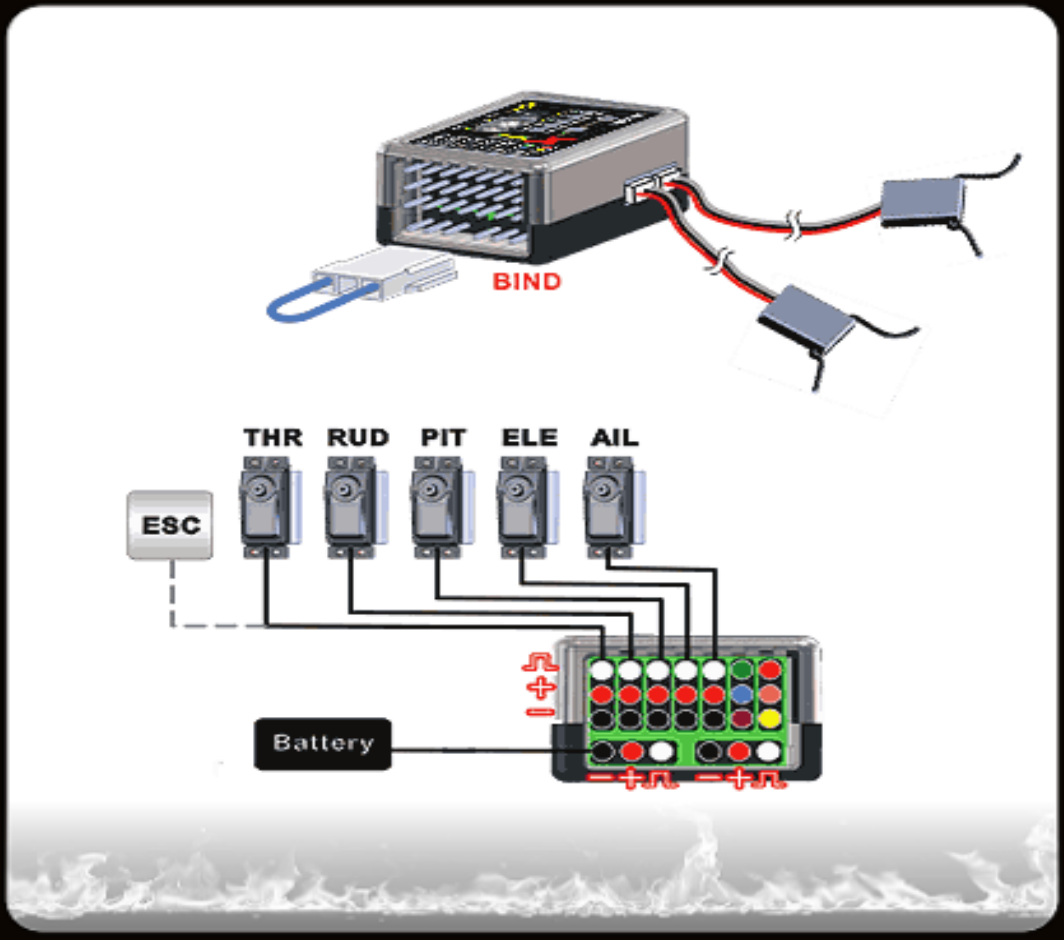
Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection meth

Installation Instruction

1.For JR or Spektrum satellite receivers, connect wires as shown in diagram.

2.To avoid damage to servos, only digital servos should be used for swashplate.

3.3GX has built in speed governor function which can be utilized by purchasing the optional speed sensor, and a 7ch or more transmitter. Governor setting is done through channel 7 on the receiver. Channel5/GEAR controls RPM of speed



Back | Next

3GX

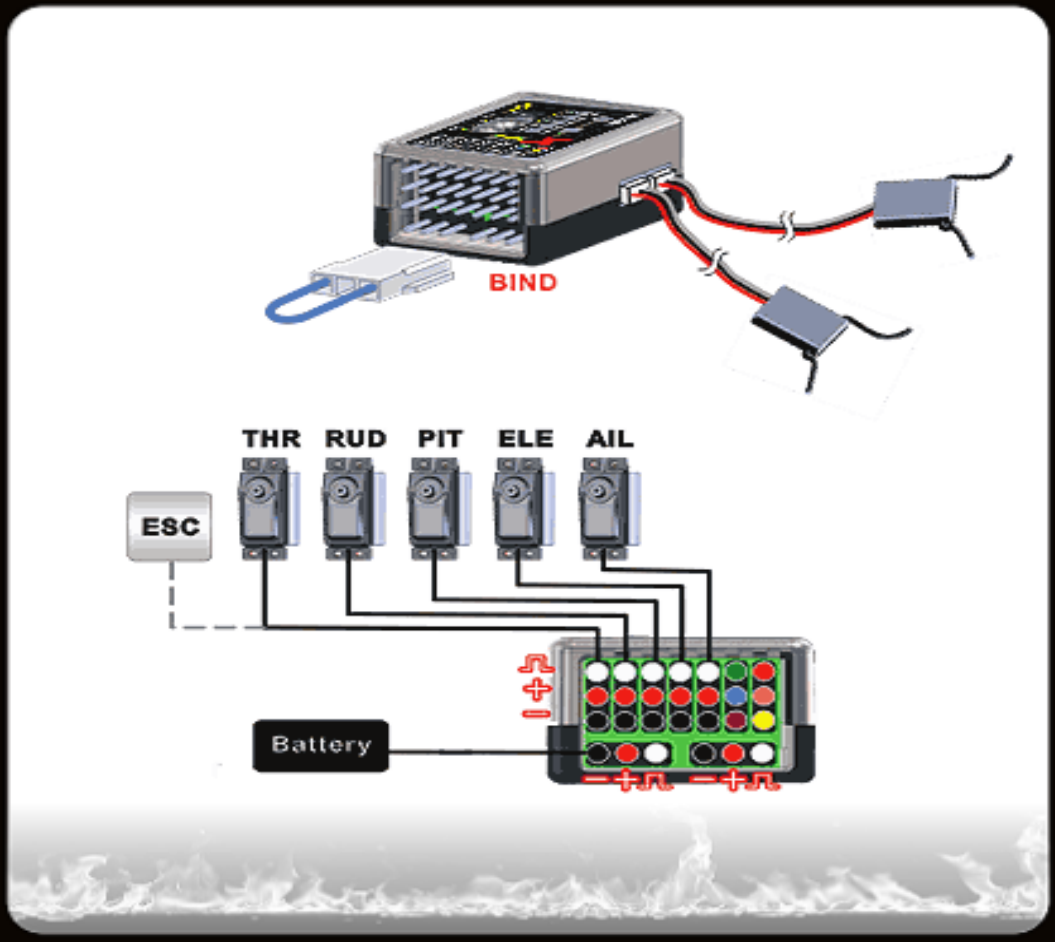
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection meth

Installation Instruction

controls RPM of speed governor, channel7/AUX2 controls rudder gyro gain.
For radios with less than 6 channels, please use standard receiver connectivity method.
4. For safety concern, two satellite receives should be used, with each antenna perpendicular (90 degrees) from each other. A satellite receiver should be installed on each side of the frame, separate by minimum



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection meth

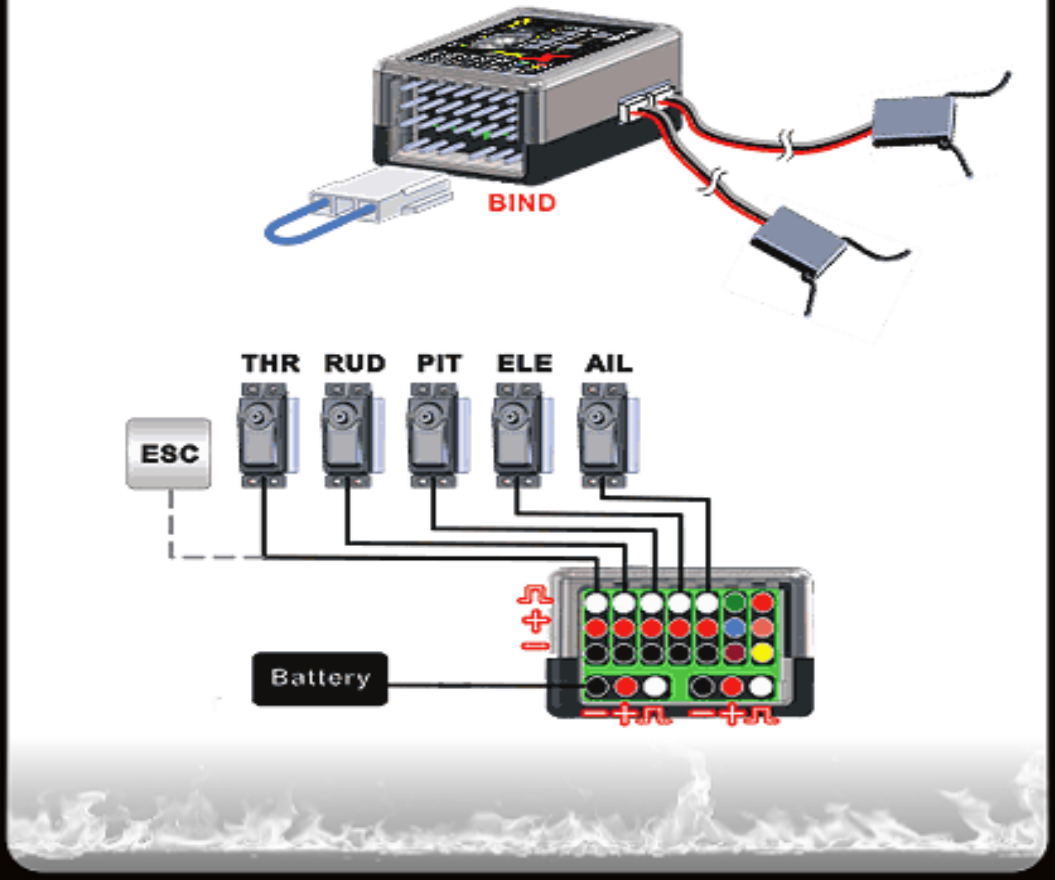
Installation Instruction

separate by minimum distance of 5cm.

5. Should both satellite receivers loose connectivity during flight, LED1 ~ LED5 will flash continuously as warning. A single power cycle of the system will not clear this error. The system need to be power cycled the second time to reset.

6.Default channel/function mapping when using satellite receiver are:

(1) THR (2)AIL (3)ELE



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection meth

Installation Instruction

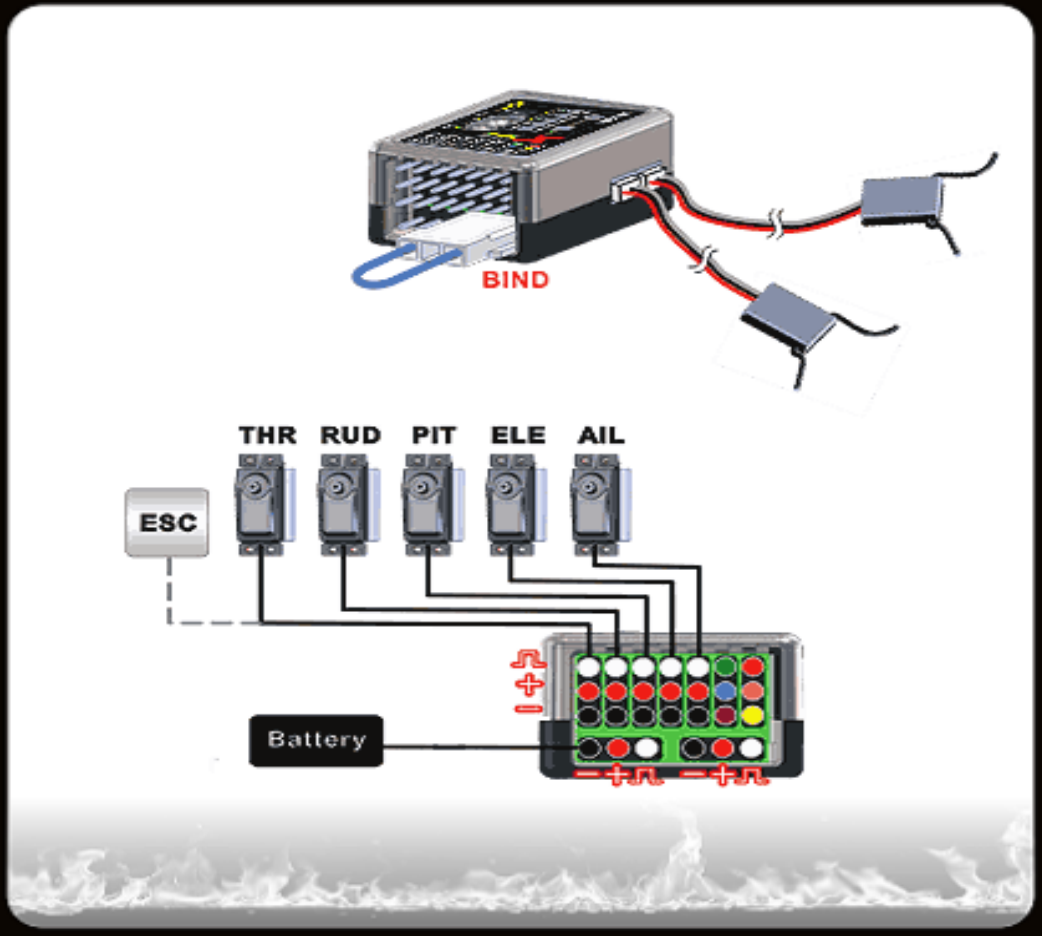
(1) THR (2)AIL (3)ELE
(4)RUD (5)GOV (6)PIT
(7)GAIN

WARNING:

1.Do not mix satellite receivers of different makes.

2.Even under correct startup sequence, if transmitter is powered off first, LED1~LED5 will also flash. Thus the receiver should always be powered off before the transmitter.

3.3GX supports satellite receiver models currently



Back | Next

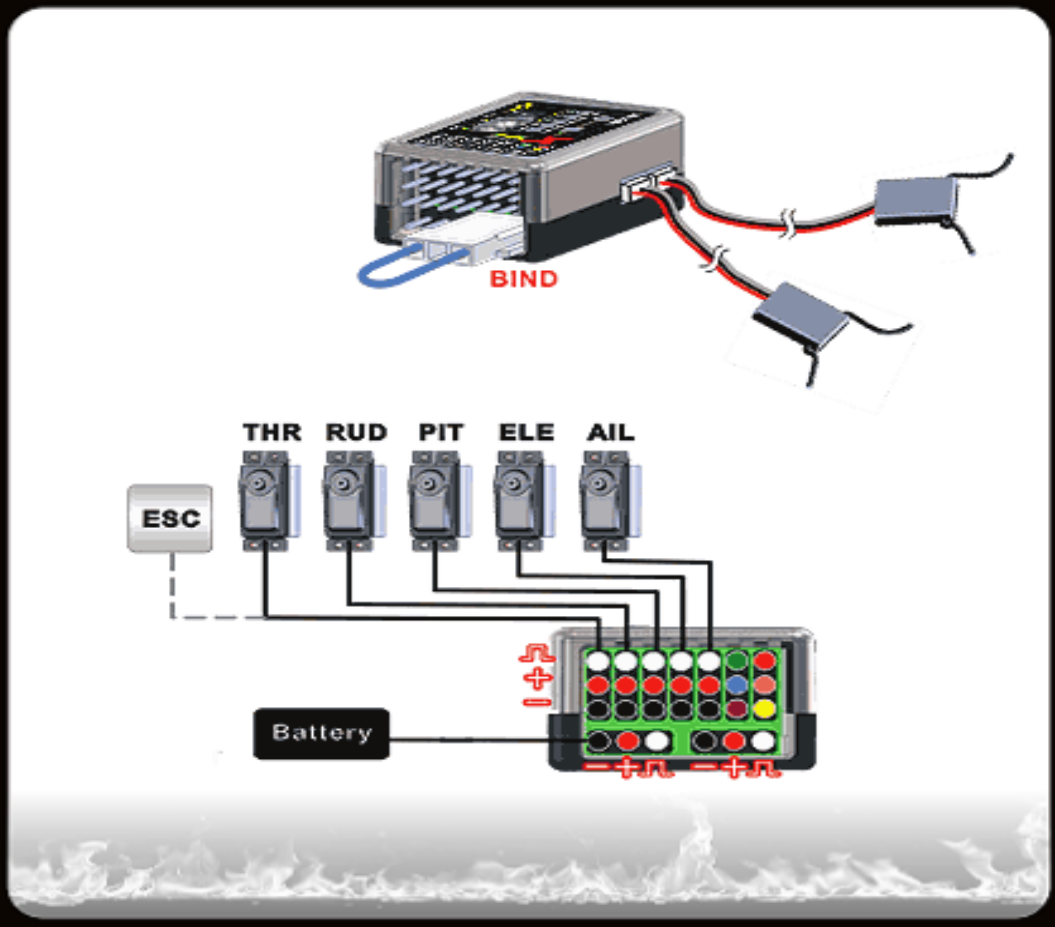
3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Futaba S-Bus Connectivity Method | JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection meth

3.3GX supports satellite receiver models currently available on the market. Should new receiver version comes out with compatibility issues, firmware will be updated to resolve any incompatibility that may arise.



Back | Next

3GX

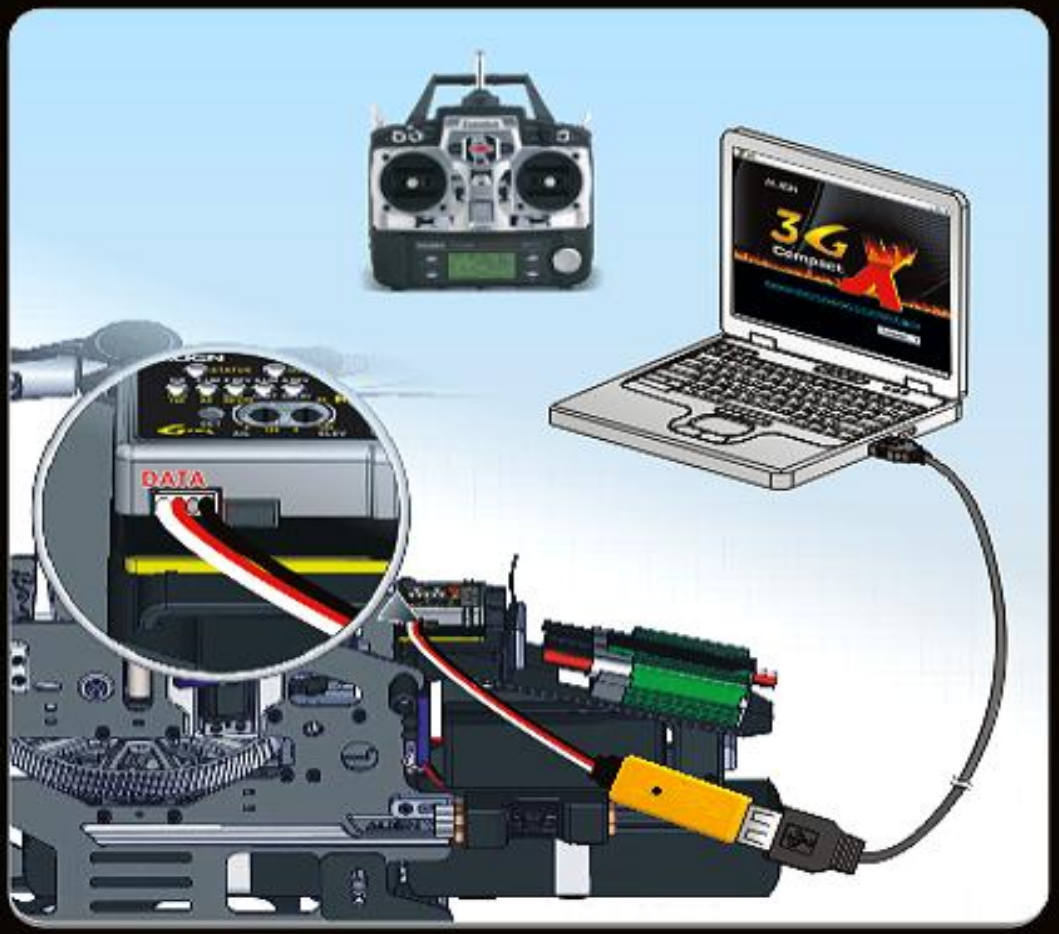
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection method

Installation Instruction

1. After connecting 3GX with receiver and servos, follow the normal radio power up sequence to power up the 3GX system.
2. Launch the 3GX software on your computer.
3. Connect one end of the included USB dongle to 3GX's DATA port, and the other end to the computer's USB port (USB extension cable sold separately)
4. Many user configurable parameters are available via



Back | Next

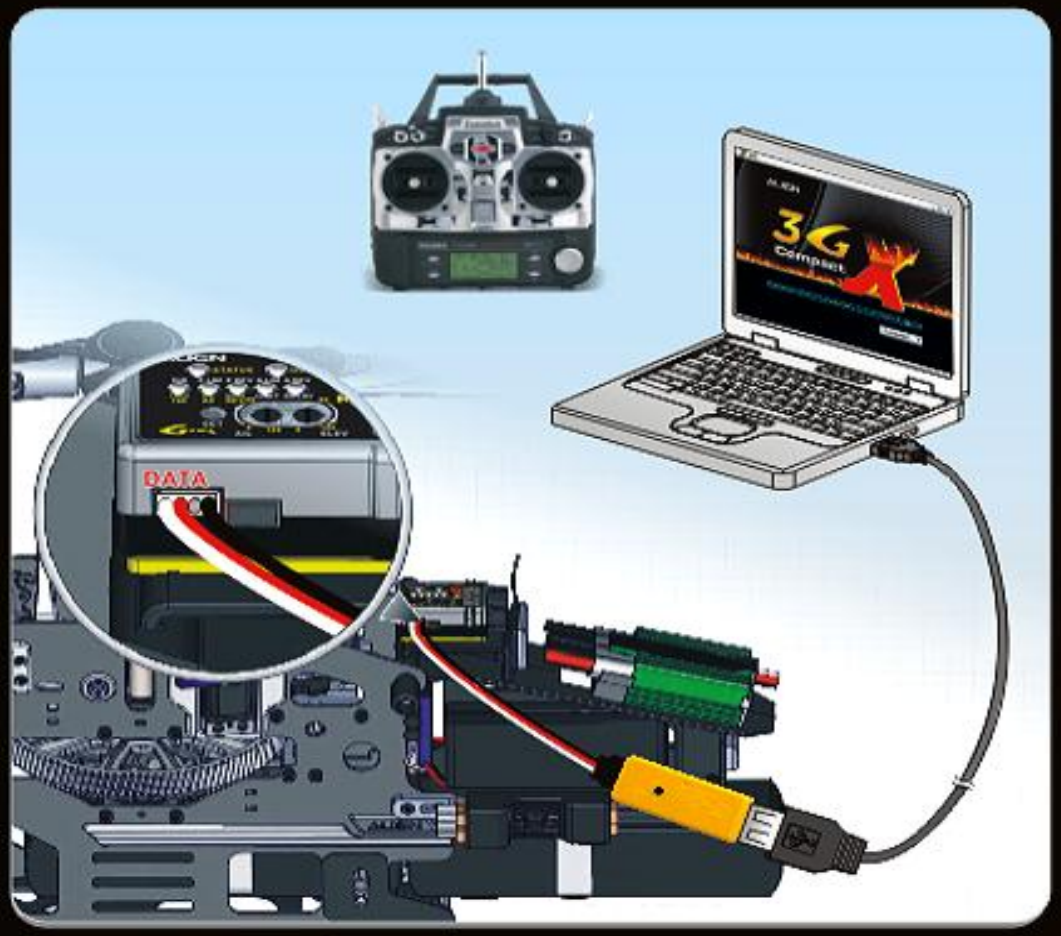
3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

JR/Spektrum Satellite Connectivity Method | 3GX and PC USB connection method

parameters are available via the 3GX computer software



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Mod

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Entering 3GX Settings

1. Press and hold the SET button while powering up the receiver. LED 1~5 (DIR~A.REV) begin to flash in sequence.
2. Release the button before the flash sequence complete, the DIR green LED will light up indicating the 3GX has been bypassed for mechanical neutral and travel range setup.

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Mod

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Entering 3GX Settings

Note:

1. If available, ensure the following functions are disabled in the transmitter:
   * Swash Ring
   * Linkage Compensation
   * Swash Mix * Mixing
   * Acceleration
2. The trim must be zero when using 3GX, and should not be adjusted at anytime. If the helicopter hovering tend one side, it means the swashplate doesn't keep horizontal when setting. Go

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Entering 3GX Settings

to Flybarless System "Direct mode bypassing gyro, for mechanical travel and neutral point setup" to adjust the level of the swashplate and then re-complete the setup.

3. Should there be changes such as 3GX software update, pitch reconfiguration, or subtrim adjustments, the setup process must be repeated for the flybarless system.

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

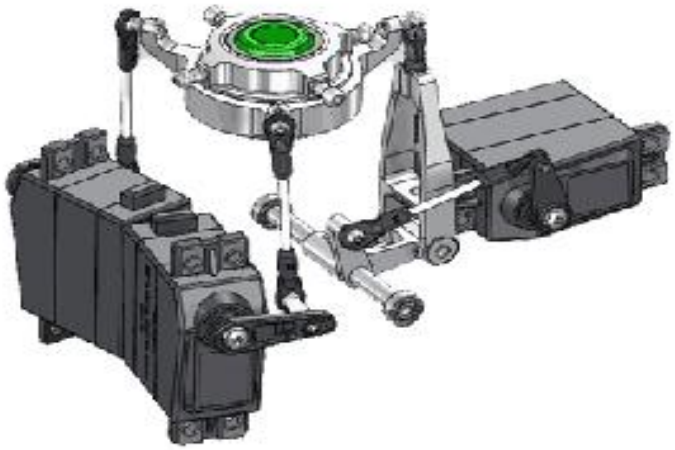
Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

1.Verify the correct swashplate movements for PIT, AIL, and ELE inputs.

2.In case of incorrect servo movement or no movement at all, please check for proper connection between 3GX flybarless connection to servos, as well as proper setup on transmitter.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

1.Adjust the servo neutral point and main blade pitch. (as shown in diagram)

2.Pay extra attention to these setup steps. Incorrect neutral points will affect flight stability, and even lead to loss of control.

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

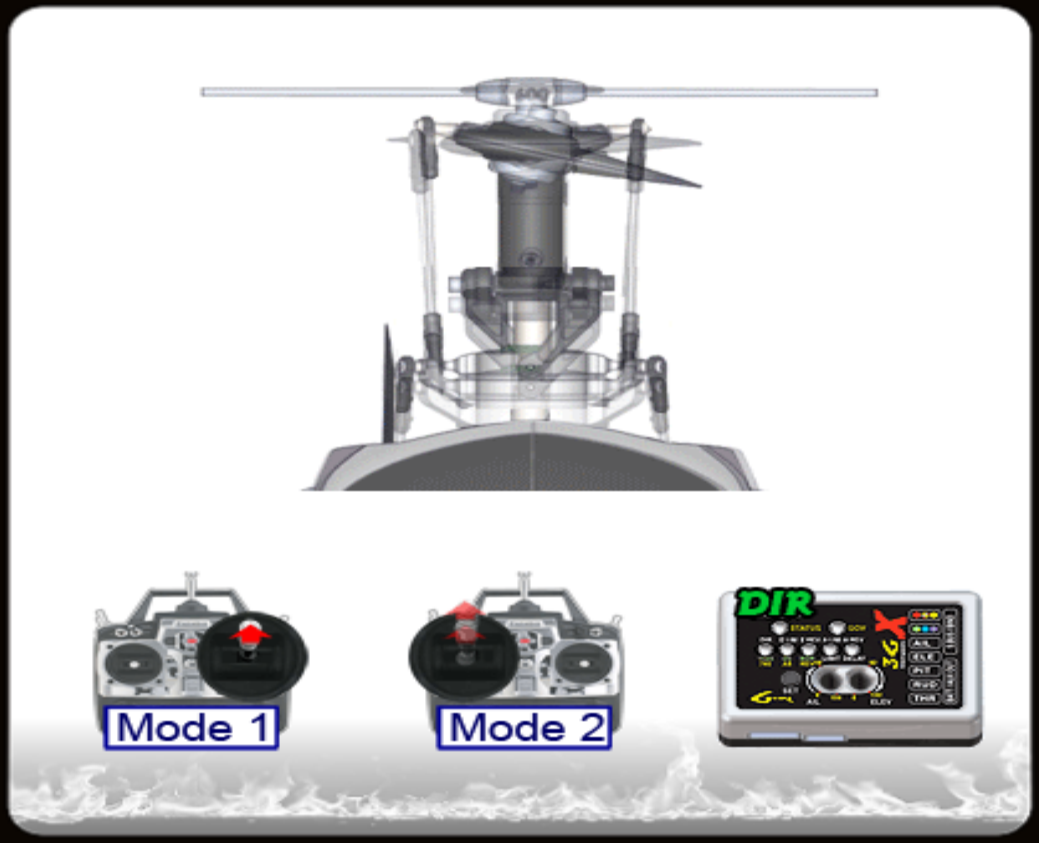
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

1.Using 600EFL PRO as an example, the recommended pitch range±12°, maximum pitch range for advanced pilot shall not exceed ±13°.
2. Adjust the maximum collective pitch using the transmitter's swashplate mixing function (pitch swash AFR). Do not adjust individual servos endpoints through the servo ATV/AFR function. Should any changes made to the endpoints or subtrims on the transmitter in the future, the 3GX flybarless system initial setup must be



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

1.Using 600EFL PRO as an example, the recommended pitch range±12°, maximum pitch range for advanced pilot shall not exceed ±13°.
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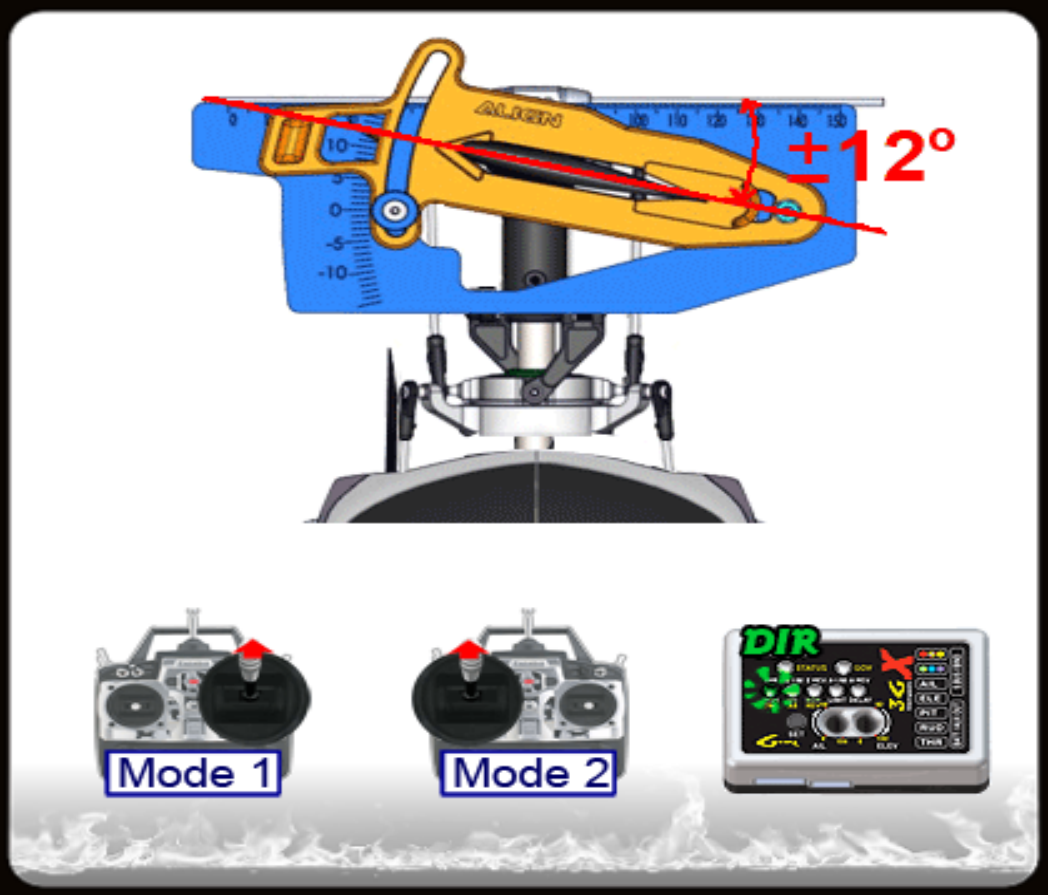


Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

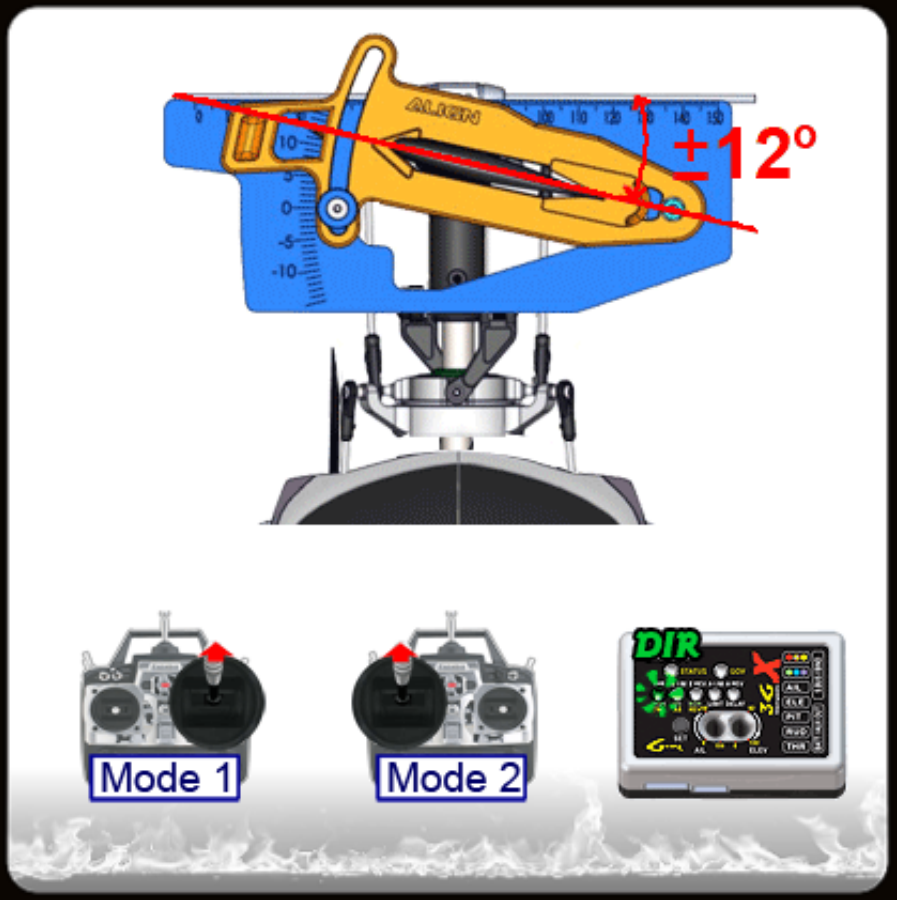
Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

performed again.

The recommended collective pitch range for various T-Rex helicopters:
(Collective Pitch Settings)
◎T-REX 250 :
With Emphasis On Stability : 12°
With emphasis on agility : 14°
◎T-REX 450 :
With Emphasis On Stability :12°
With emphasis on



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

With emphasis on agility:14°

◎T-REX 500 :

With Emphasis On Stability :10~12°

With emphasis on agility :12~14°

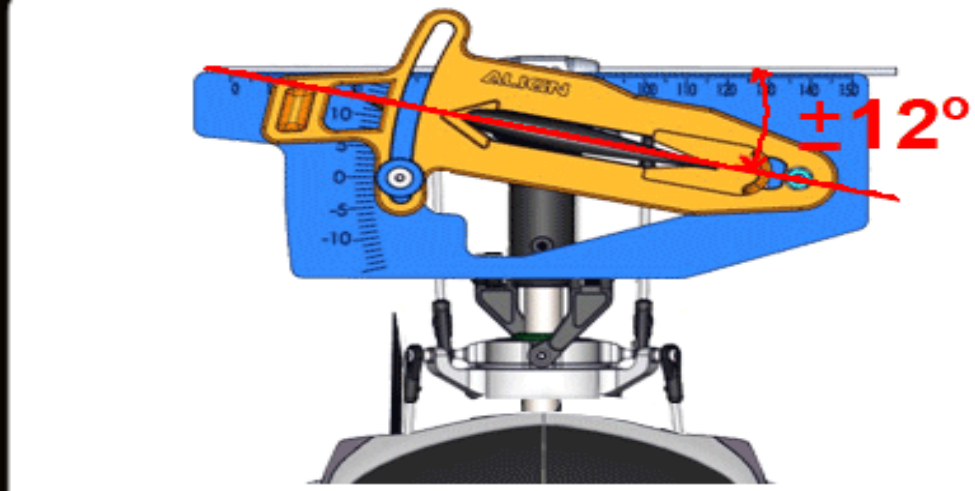
◎T-REX 550 :

With Emphasis On Stability :10~12°

With emphasis on agility :12~14°

◎T-REX 600 :

With Emphasis On Stability



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Swashplate Movement Confirmation | Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic P

Operation Instruction

:10~12°
With emphasis on agility
:12~13°
◉T-REX 700 :
With Emphasis On Stability
:10~12°
With emphasis on agility
:12~14°

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

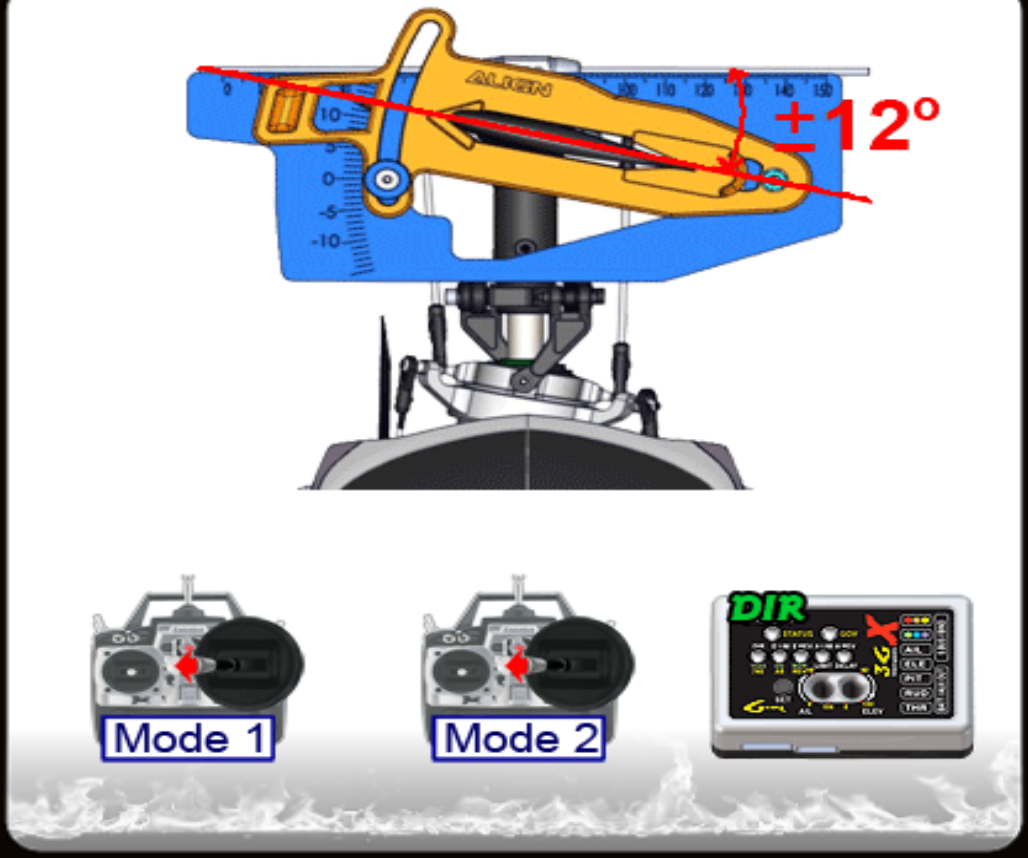
Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic Pitch Range Setting

Operation Instruction

1.Maximum cyclic pitch setup: With main blade parallel to helicopter body, and pitch at 0 degree, move the transmitter aileron stick all the way left, and adjust the AIL mixing percentage in SWASH settings to the factory recommended value.

2.The recommended cyclic pitch range for various T-Rex helicopters (must be done under DIR mode):



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic Pitch Range Setting

Operation Instruction

◉T-REX 250 :

With Emphasis On Stability : 12°

With emphasis on agility : 14°

◉T-REX 450 :

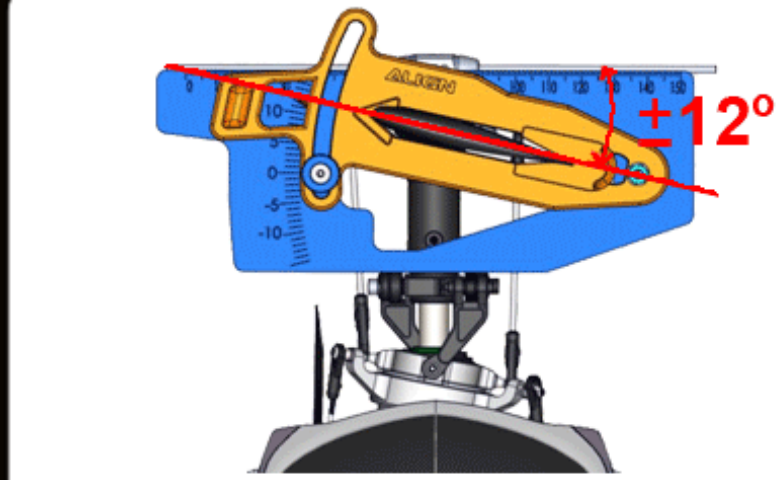
With Emphasis On Stability :9°

With emphasis on agility:11°

◉T-REX 500 :

With Emphasis On Stability :7°

With emphasis on agility :9°



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering 3G Setup | Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoi

Mechanical Construct Setting | Main Blades Pitch Range Setting | Cyclic Pitch Range Setting

Operation Instruction

◉T-REX 550 :

With Emphasis On Stability :12°

With emphasis on agility :14°

◉T-REX 600 :

With Emphasis On Stability :8°

With emphasis on agility :9°

◉T-REX 700 :

With Emphasis On Stability :12°

With emphasis on agility :12°

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

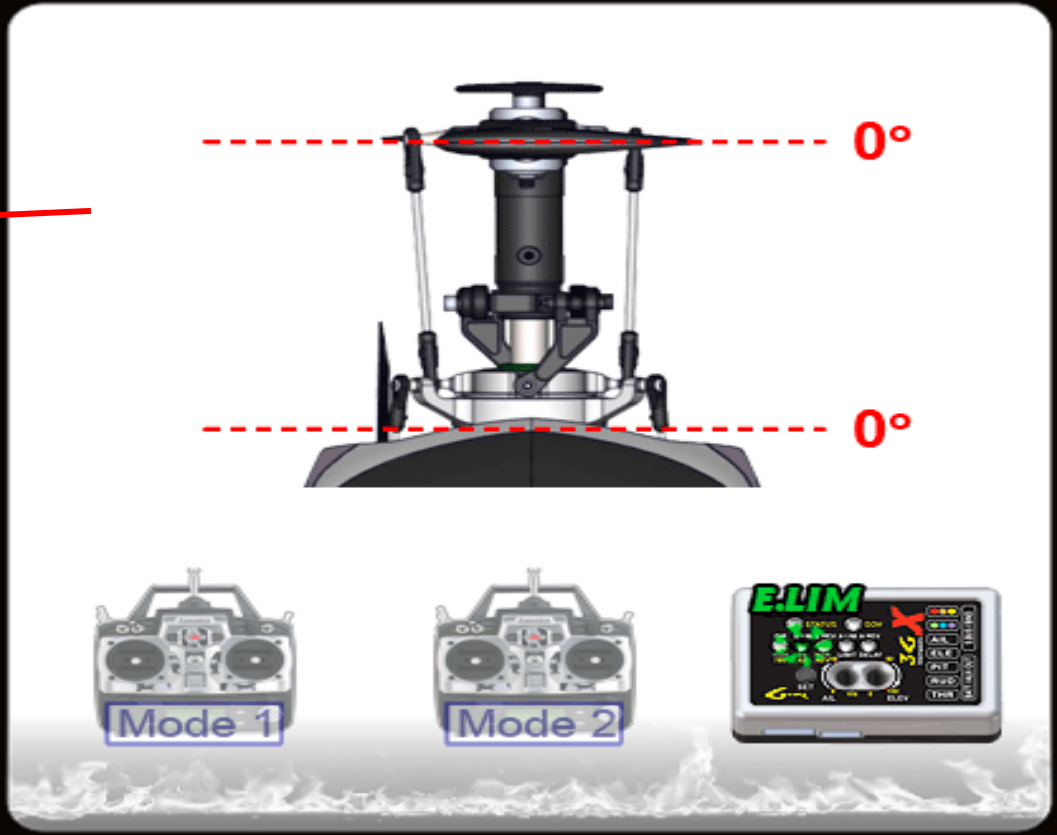
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoint settings | elevato

Entering E.LIM setup mode | Swashplate mixing type recognition and elevator endpoint setup

Operation Instruction

1.While keeping swashplate level and main pitch at zero degrees, press the SET button to register the neutral point and enter E.LIM
setup mode. The E.LIM LED will lit up after DIR turns off.
2.The throttle stick position where main pitch is 0 degree must be maintained through this setup process.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoint settings | elevato

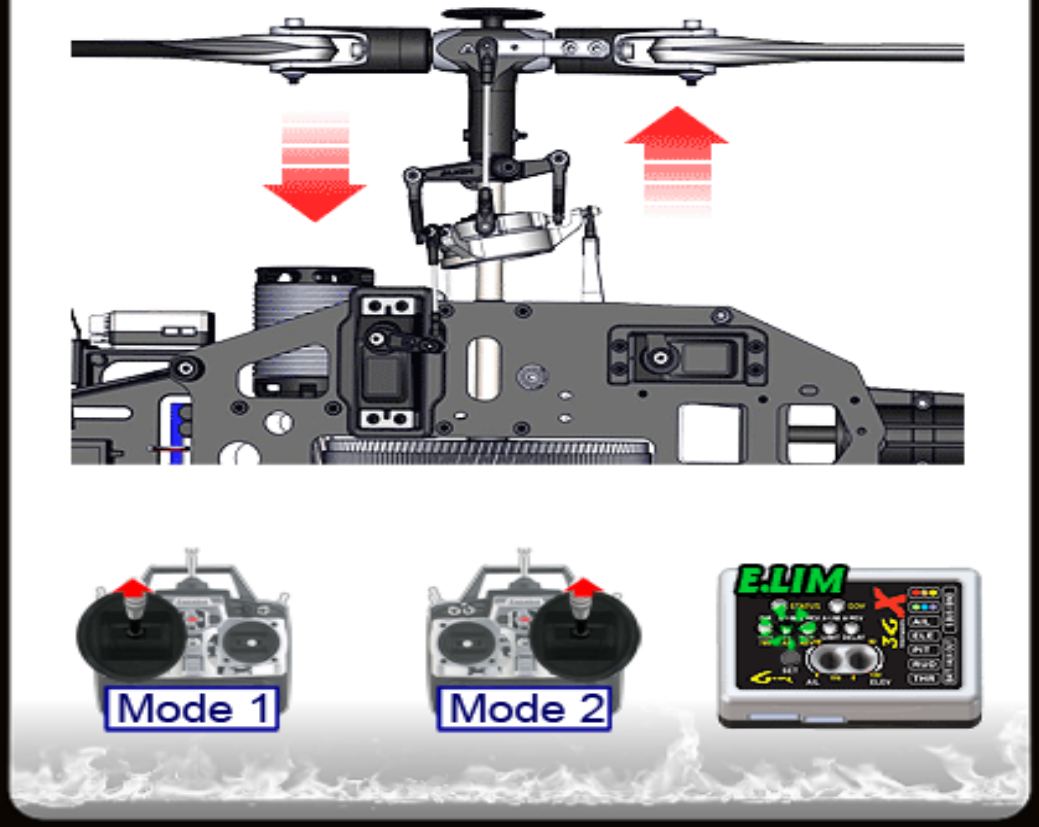
Entering E.LIM setup mode | Swashplate mixing type recognition and elevator endpoint setup

Operation Instruction

1.With all channels stationary, move the transmitter elevator stick forward, and then back to center position. This completes the swashplate mixing type recognization process.

The control unit will determine the CCPM mixing ratio or traditional mechanicalmixing maximum elevator endpoints.

2.Throttle stick position where main pitch is 0 degree



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

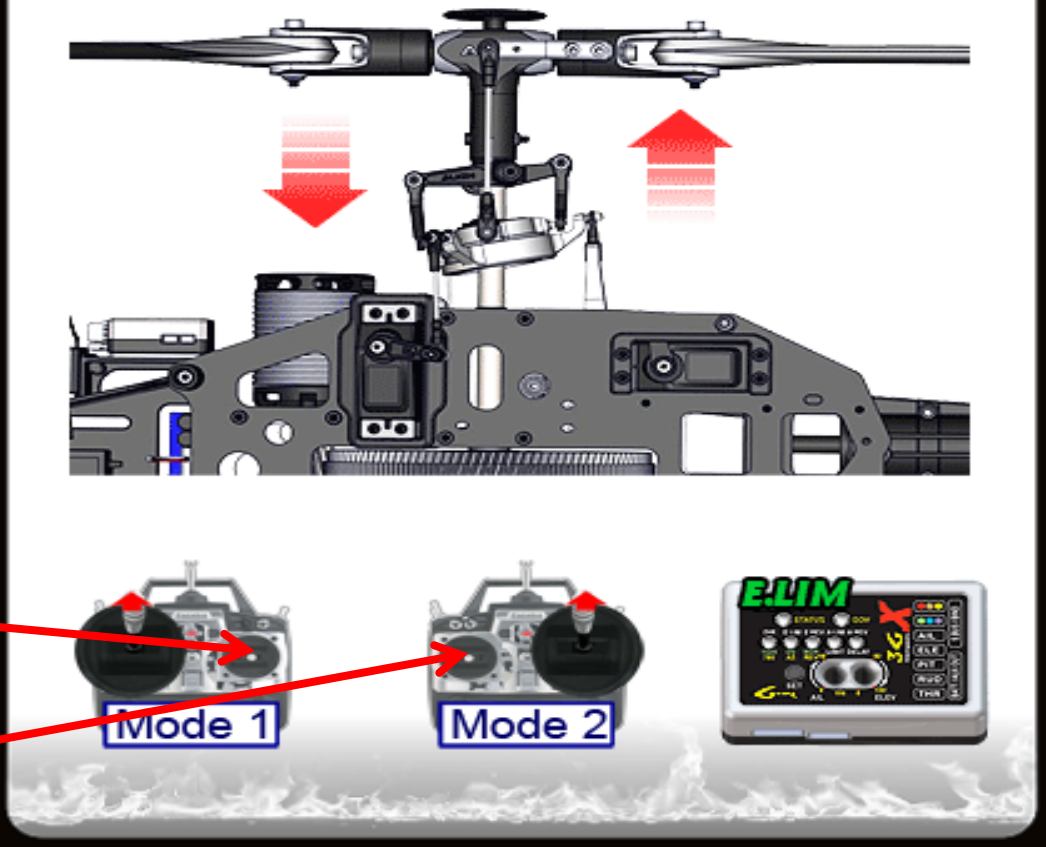
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Direct mode bypassing gyro, for mechanical travel and neutral point setup. | elevator endpoint settings | elevato

Entering E.LIM setup mode | Swashplate mixing type recognition and elevator endpoint setup

Operation Instruction

2.Throttle stick position where main pitch is 0 degree must be maintained through this setup process.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

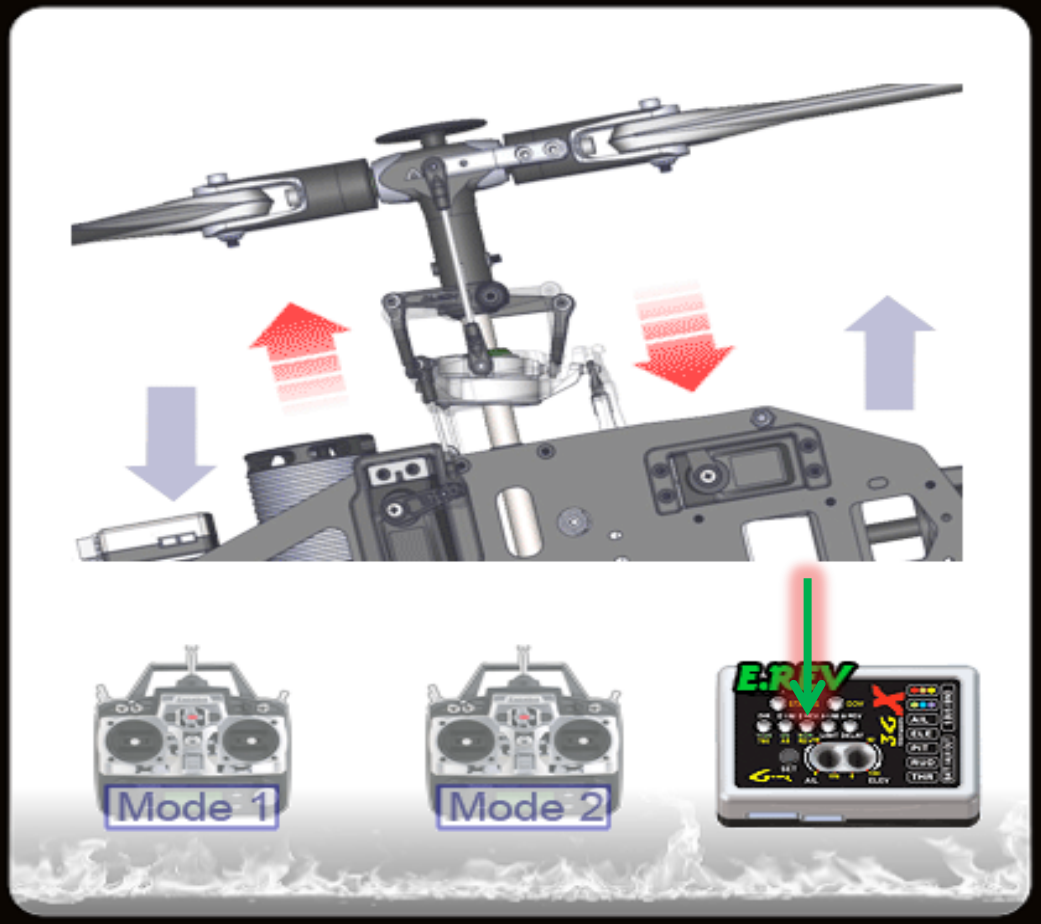
elevator endpoint settings | elevator pitch range settings | Aileron endpoints settings | Aileron pitch range setting:

Setting Instruction

1.Press the SET button to enter E.REV setup mode. The E.REV LED will lit up after E.LIM turns off. This setup mode sets the elevator gyro direction

2. Tilt the helicopter forward as shown in diagram, and check if swashplate is tilting correctly toward the back.

3. If the swashplate is tilting at the wrong direction, move the transmitter elevator stick until STATUS LED changes color, and re-check the



Back | Next

3GX

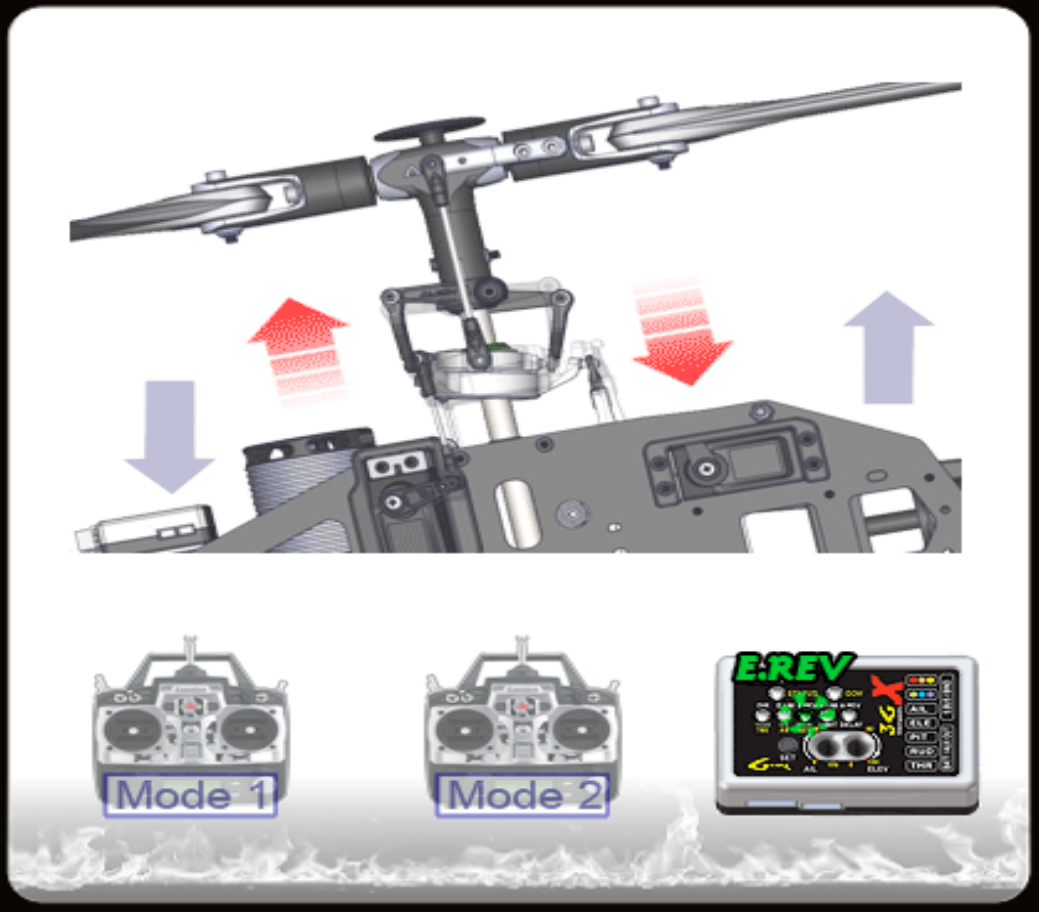
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

elevator endpoint settings | elevator pitch range settings | Aileron endpoints settings | Aileron pitch range setting:

Setting Instruction

until STATUS LED changes color, and re-check the swashplate tilting direction.



Back | Next

3GX

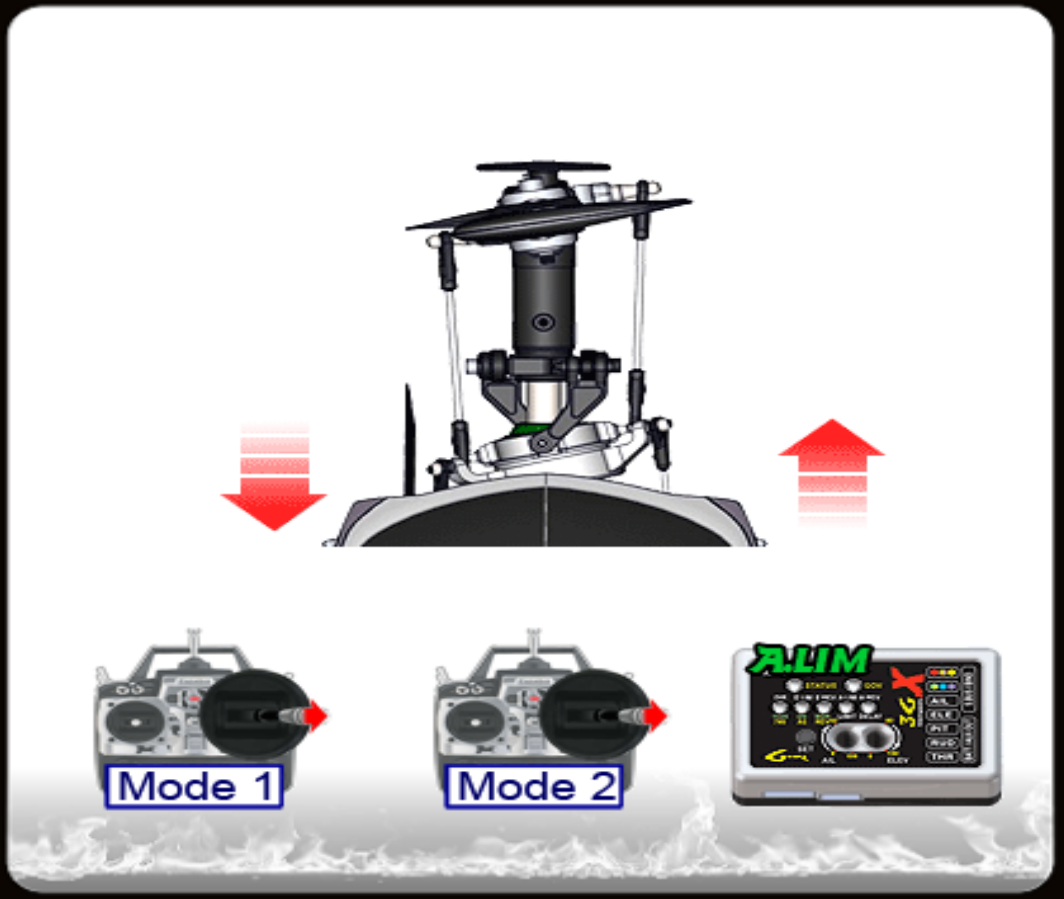
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

elevator endpoint settings | elevator pitch range settings | Aileron endpoints settings | Aileron pitch range setting

Setting Instruction

Press the SET button to enter A.LIM setup mode. The A.LIM LED will lit up after E.REV turns off. With all channels stationary, move the transmitter aileron stick to the right, and then back to center position. This completes the aileron endpoint setup process. The control unit will determine the maximum aileron endpoints.



Back | Next

3GX

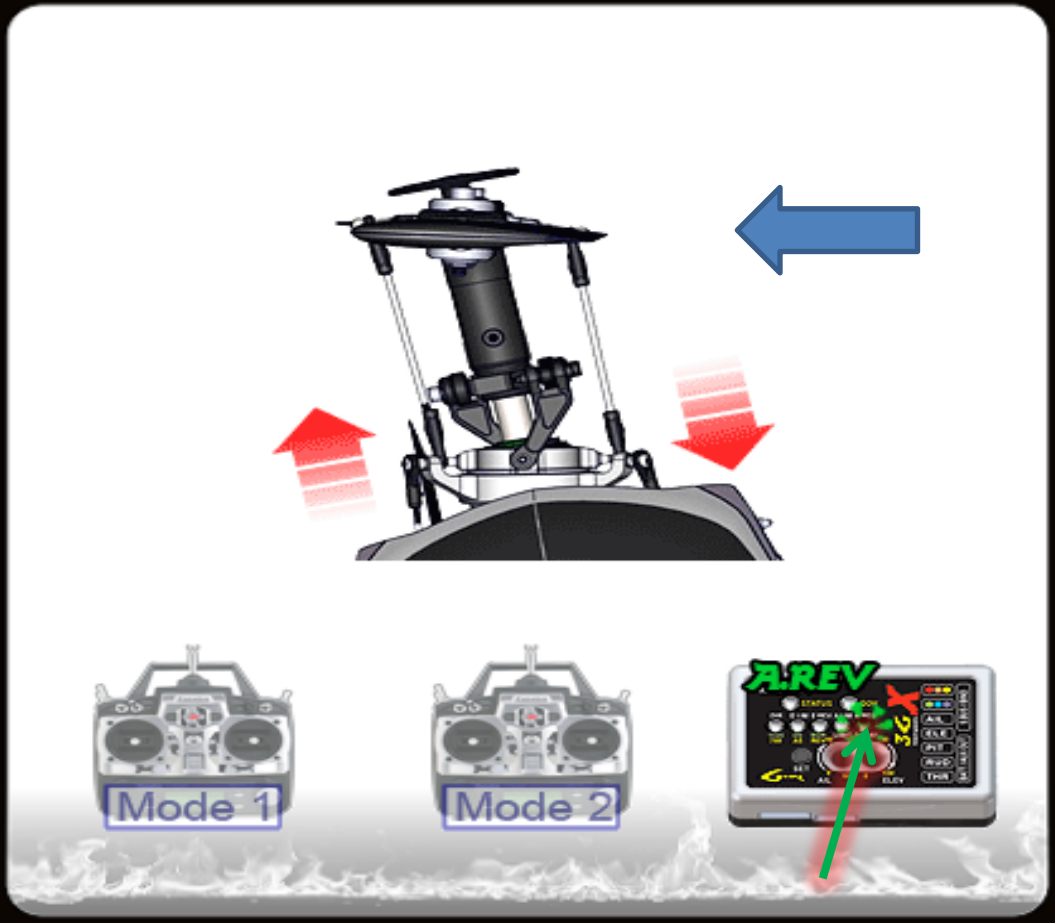
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

elevator pitch range settings | Aileron endpoints settings | Aileron pitch range settings

Installation Instruction

Press the SET button to enter A.REV setup mode. The A.REV LED will lit up after A.LIM turns off. Tilt the helicopter right as shown in diagram, and check if swashplate is tilting correctly toward the left. If the swashplate is tilting at the wrong direction, move the transmitter aileron stick until STATUS LED changes color, and re-check the swashplate tilting direction. Press the SET button again, and the



Back | Next

3GX

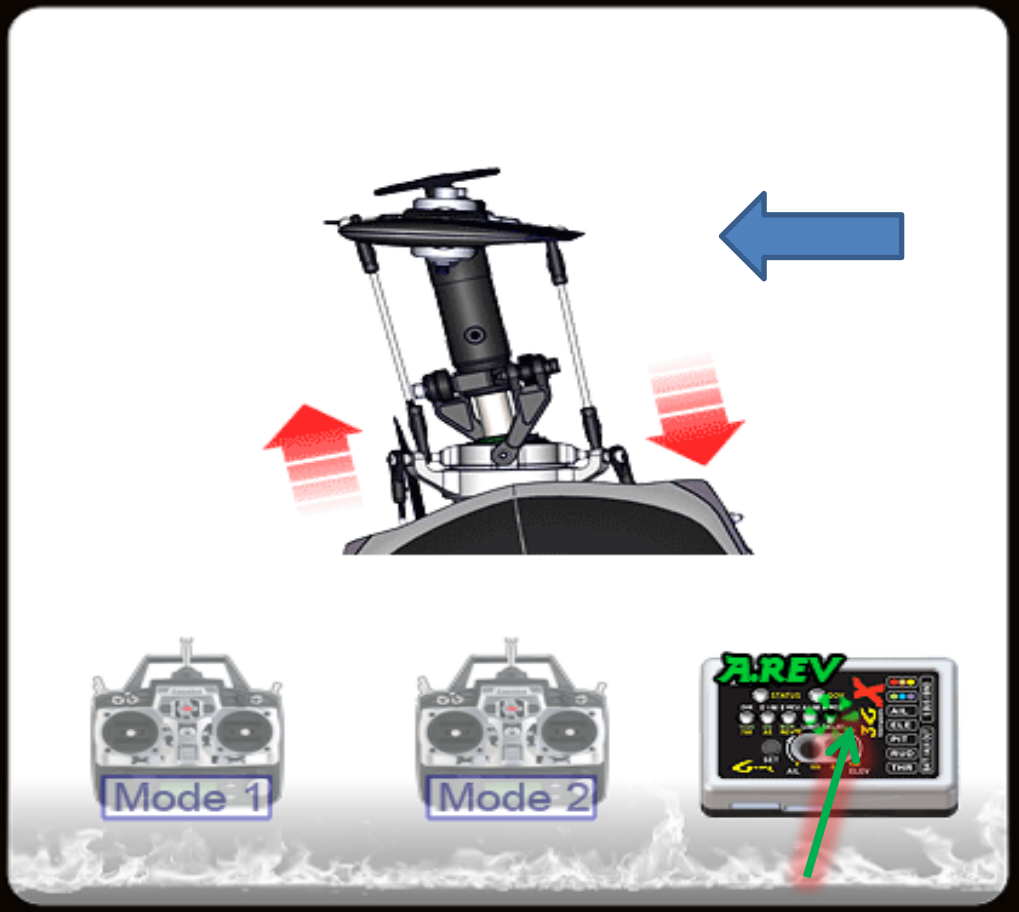
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

elevator pitch range settings | Aileron endpoints settings | Aileron pitch range settings

Installation Instruction

tilting direction. Press the SET button again, and the control unit will restart with all LED's flashing.
This completes the flybarless portion of the setup process.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

Entering Rudder Gyro Setup | Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction F

Usage Instruction

1. Push and hold the SET button for 2 second to enter the rudder gyro setup mode while 3GX is turned on.
2. Each setting value is labeled on the 3GX control unit with either green or red lettering, which corresponds to the STATUS LED color. Subsequent setup mode is entered by a single press of the SET button. Setup mode will exit if no activity is detected in 10 seconds.

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering Rudder Gyro Setup | Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction F

Operation Instruction

1.3G Flybarless system is compatible with both the 760µs narrow frame rate servos (such as Futaba S9256, S9251, BLS251), as well as the standard 1520µs frame rate servos (most others). Proper frame rate must be selected based on your servo's specifications.
2.Push the ransmitter rudder stick left or right to select the frame rate. For example, if rudder is pushed to the left (or right) and STATUS LED turns green, the frame rate is set to 1520µs. To set it to 760µs, the rudder stick need

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering Rudder Gyro Setup | Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction

Operation Instruction

S9251, BLS251), as well as the standard 1520µs frame rate servos (most others). Proper frame rate must be selected based on your servo's specifications.

2.Push the ransmitter rudder stick left or right to select the frame rate. For example, if rudder is pushed to the left (or right) and STATUS LED turns green, the frame rate is set to 1520µs. To set it to 760µs, the rudder stick need to be pushed from the center to the opposing end 3 times for the STATUS LED to turn red, indic ating frame rate set to 760µs.

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Entering Rudder Gyro Setup | Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction I

Operation Instruction

1.There is a direct correlation between servos' speed to gyro's performance. Faster servos are able to execute commands from the gyro at faster and higher precision. Due to the high performance gyro sensors used in the 3G flybarless system, premium high speed digital rudder servos are mandatory for optimal tail performance. Some of the recommended rudder servos include Align DS650, DS620, DS520, DS420

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

Entering Rudder Gyro Setup | Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction F

Operation Instruction

DS650, DS620, DS520, DS420, Futaba S9257, S9256, S9254, S9253, or other servos with similar specifications.

2.Setup method：Press and hold the SET button for 2 seconds to enter the setup mode, then press the SET button to select DS/AS setup mode, as indicated by the lighting of DS/AS LED. Using the transmitter's rudder stick, select either digital servo DS mode (STATUS LED is green) or analog servo AS

Back | Next

3GX

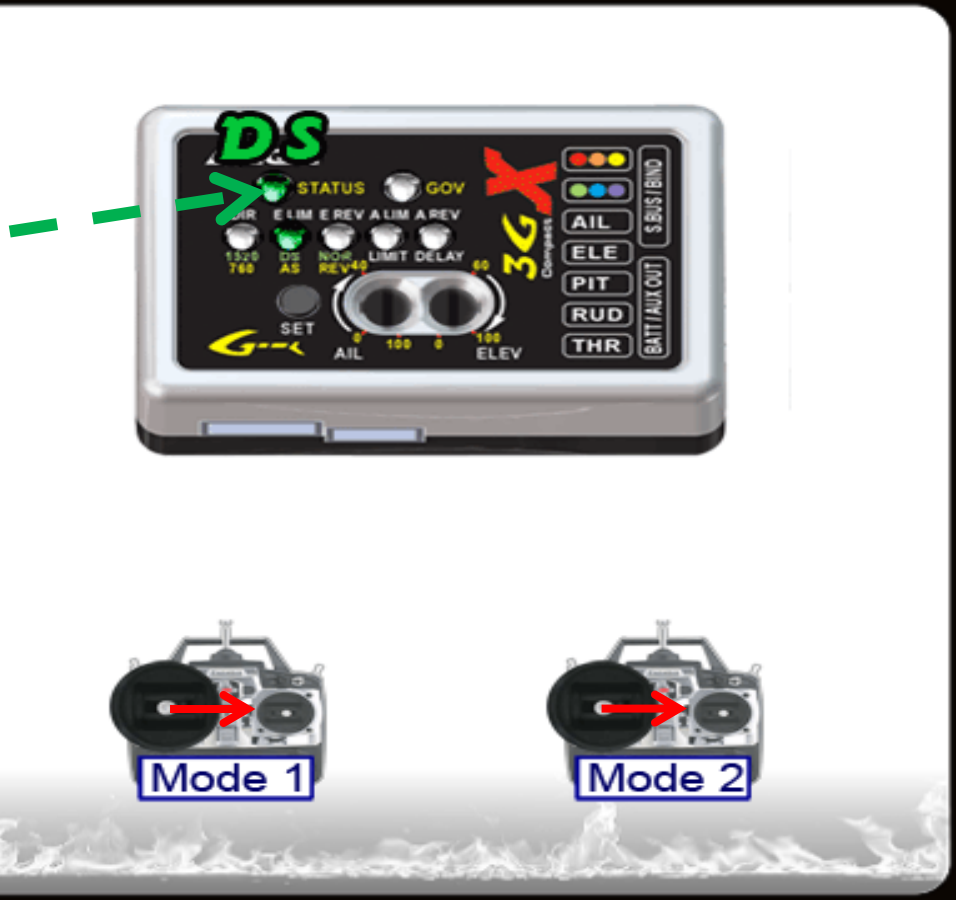
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Mod

Entering Rudder Gyro Setup | Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction

Operation Instruction

mode (STATUS LED is green),or analog servo AS mode (STATUS LED is red).



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

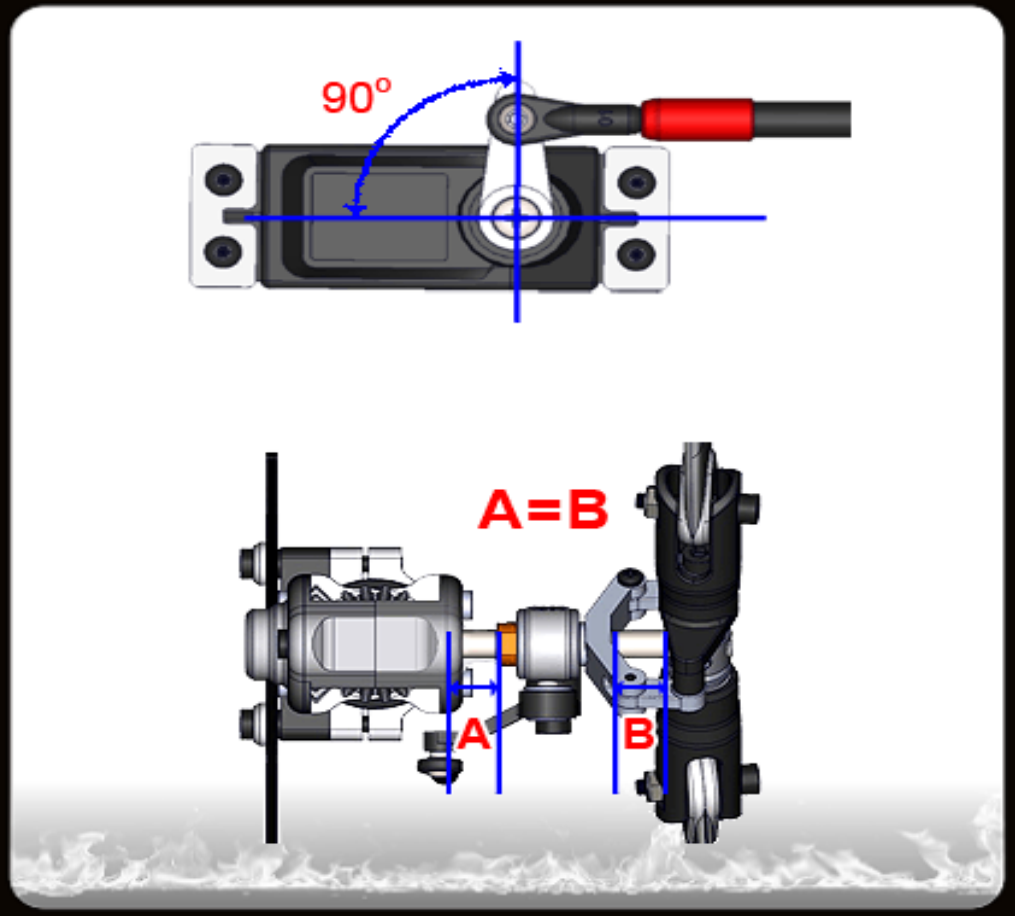
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction Reverse | Gyro Direction Rever

Operation Instruction

1.Move the transmitter rudder stick left/right, and check for the correct direction of the rudder servo. If needed, servo reverse is done from the transmitter's REV (reverse) function.

2.For tail pitch adjustment, center the rudder servo by either setting the 3G flybarless to normal rate mode (non-heading lock), or press and hold the SET button for 2 seconds



Back | Next

3GX

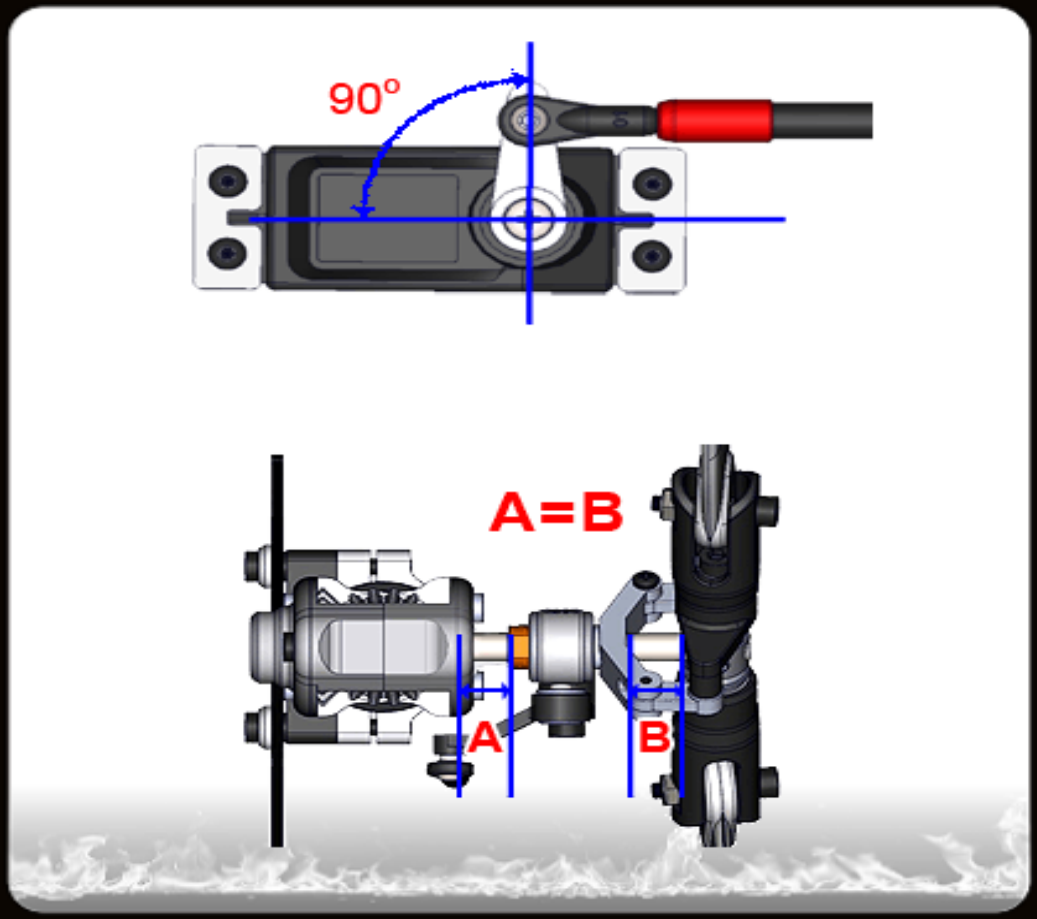
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

Wide Frame rate servo setting | Digital / Analog servo selection | Rudder Direction Reverse | Gyro Direction Rever

Operation Instruction

SET button for 2 seconds.
With the rudder servo centered and servo horn at 90 degrees,
adjust the linkage length until tail pitch slider is centered on the tail output shaft as shown in diagram.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Digital / Analog servo selection | Rudder Direction Reverse | Gyro Direction Reverse | Rudder Servo Travel Limit

Operation Instruction

1.Lift up the helicopter by hand, and turn it to the left (yaw). Check if the rudder servo is applying correct compensation to the right. If reversed, set the NOR/REV setting as follow.

2.Setup method：Press and hold the SET button for 2 seconds to enter the setup mode, then press the SET button to select NOR/REV setup mode, as indicated by the lighting of NOR/REV LED. Using the

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Digital / Analog servo selection | Rudder Direction Reverse | Gyro Direction Reverse | Rudder Servo Travel Limit

Operation Instruction

indicated by the lighting of NOR/REV LED. Using the transmitter's rudder stick, select either NOR (STATUS LED is green),or REV (STATUS LED is red).

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

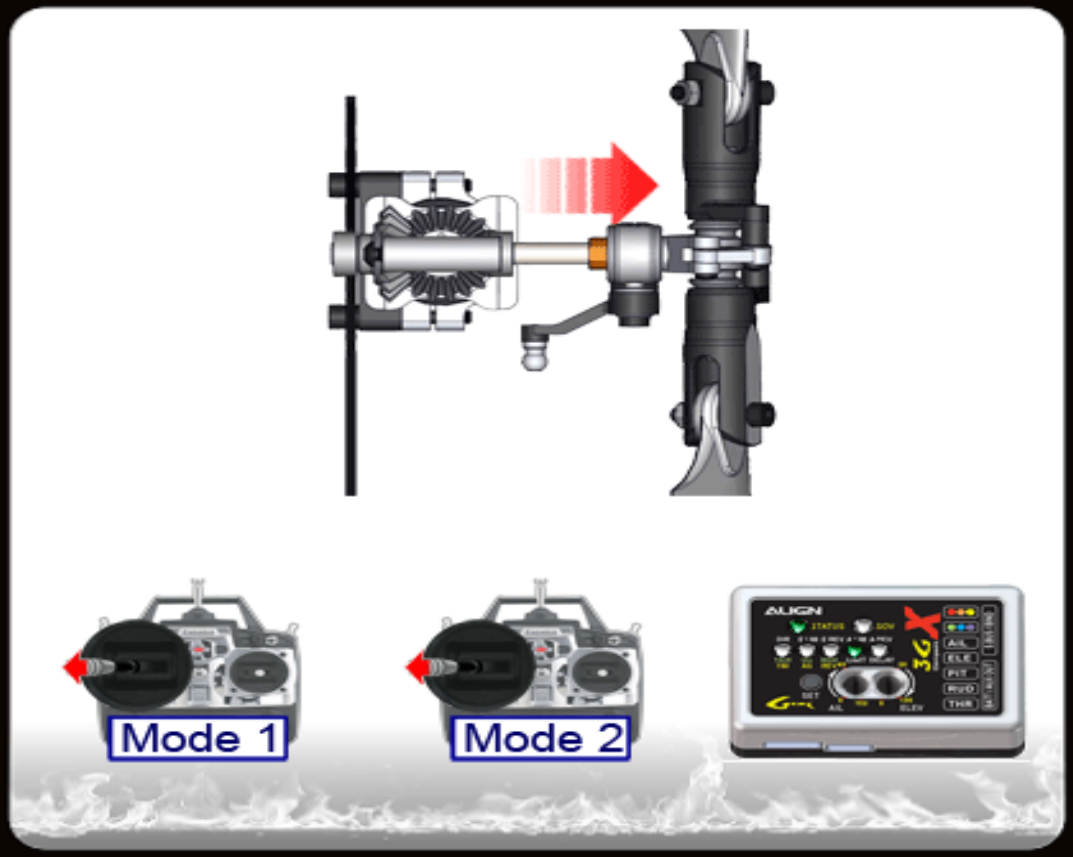
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Digital / Analog servo selection | Rudder Direction Reverse | Gyro Direction Reverse | Rudder Servo Travel Limit

Left Travel Limit Setting | Right Travel Limit Setting

Operation Instruction

Press the SET button to enter LIMIT setup mode.
Push the transmitter rudder stick left until tail pitch slider reaches the end,then center the rudder stick and wait 2 seconds for the
STATUS LED to flash red. This completes the rudder endpoint limit adjustment for the left side.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

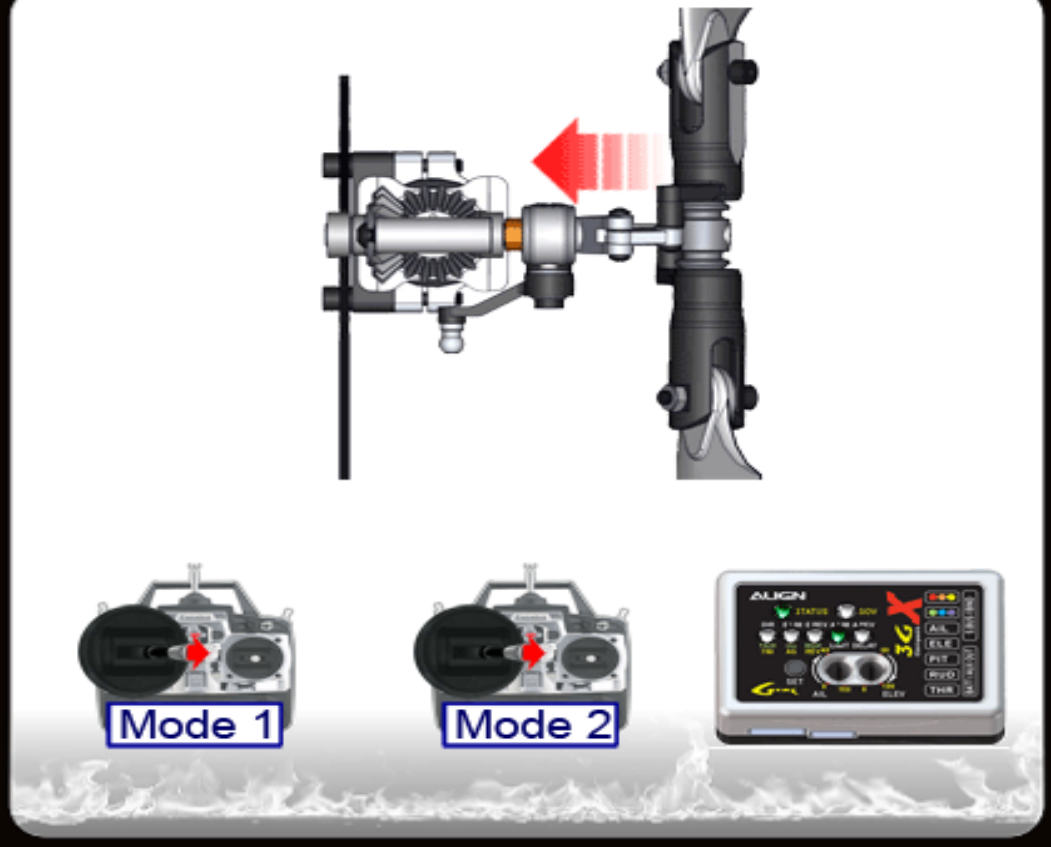
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Digital / Analog servo selection | Rudder Direction Reverse | Gyro Direction Reverse | Rudder Servo Travel Limit

Left Travel Limit Setting | Right Travel Limit Setting

Operation Instruction

Push the rudder stick right until tail pitch slider reaches the end, then center the rudder stick and wait 2 seconds for the STATUS LED to flash red. This completes the rudder endpoint limit adjustment for the right side.



Back | Next

3GX

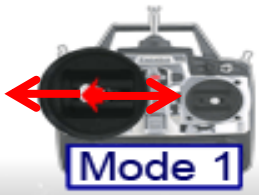
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

Rudder Direction Reverse | Gyro Direction Reverse | Rudder Servo Travel Limit | Helicopter Type and Delay | Rudc

Setting Instruction

Press SET button to select DELAY setup mode. The choice of small or large helicopter is done by moving the transmitter rudder stick left or right while observing the color of STATUS LED. For example, T-REX 500/550/600/700 the STATUS LED will be green. T-REX 250/450 the STATUS LED will be red. The amount of rudder stick moved from center is the DELAY amount.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Rudder Direction Reverse | Gyro Direction Reverse | Rudder Servo Travel Limit | Helicopter Type and Delay | Rudc

Setting Instruction

center is the DELAY amount. When DELAY LED begins to flash, delay is at 0%. When rudder stick is pushed to the end, delay is at 100%. Confirm the setting by pushing the SET button.

Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Linking...

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

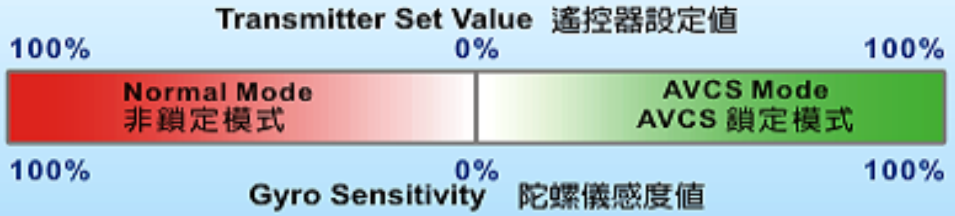
Gyro Direction Reverse | Rudder Servo Travel Limit | Helicopter Type and Delay | Rudder Gain Adjustment

Setting Instruction

1.For radio with built in gyro gain settings, gain can be adjusted directly. For example, 50%-100% setting on the radio translates to 0% - 100% gain in the heading lock mode; 50%-0% setting on the radio translates to 0%-100% gain in the normal (non-heading) lock mode.
2.Actual gain value differs amongst servos and helicopters. The goal is to find the maximum gain without tail hunting. This can

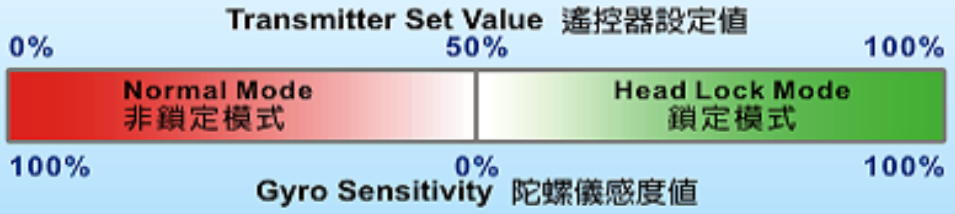
Futaba

Gyro Sensitivity Adjustment 陀螺儀感度調整



JR or Spektrum

Gyro Sensitivity Adjustment 陀螺儀感度調整



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Mod

Gyro Direction Reverse | Rudder Servo Travel Limit | Helicopter Type and Delay | Rudder Gain Adjustment

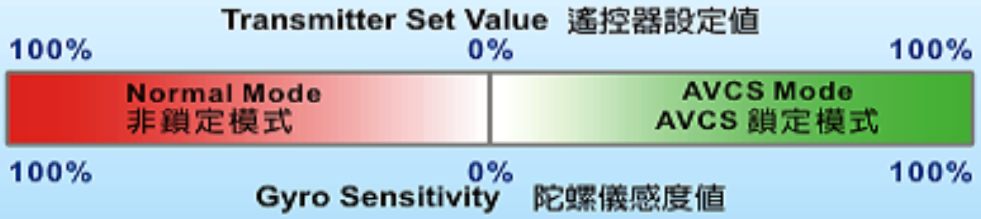
Setting Instruction

without tail hunting. This can onlybe done through actual flight tests.

3.The recommended starting point for transmitter's gyro gain setting should be 70~80% for hovering, 60~70% for idle-up. Value should be tuned under actual flight conditions by increasing to the maximum gain without tail hunting.

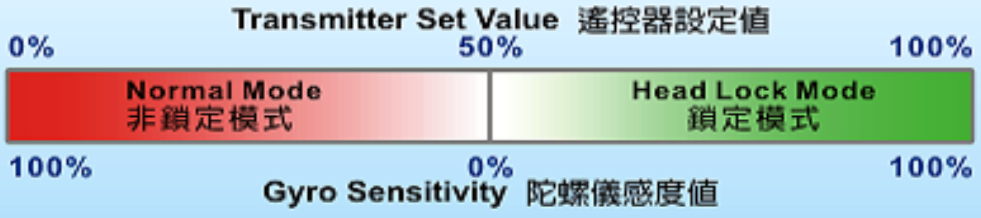
Futaba

Gyro Sensitivity Adjustment 陀螺儀感度調整



JR or Spektrum

Gyro Sensitivity Adjustment 陀螺儀感度調整



Back | Next

3GX

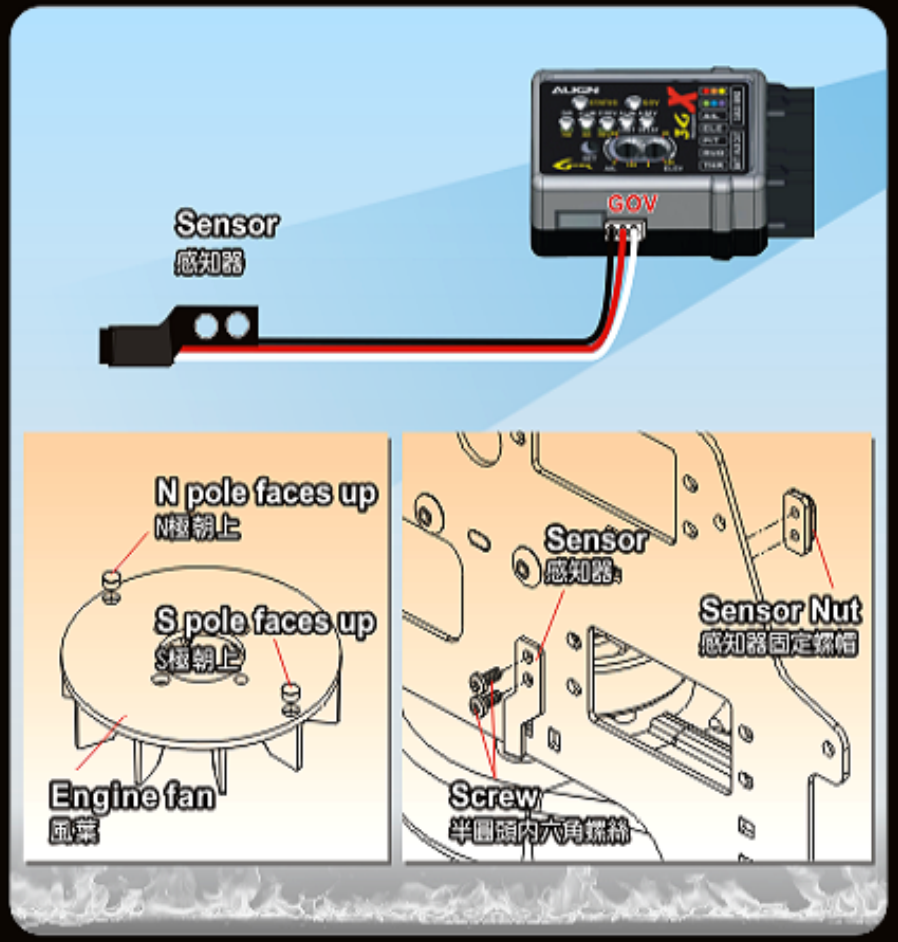
Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

Governor Connection | Entering Governor Settings | Governor Function Settings

Setting Instruction

1. Ensure correct throttle servo direction and mechanical travel range prior to connecting the governor.
2. Connect wires and install sensor magnet as shown in diagram.
3. When using standard parallel channel layout or S.BUS system to connect the 3GX, speed setting is done through channel 7. Turning channel 7 on or off will enable/disable governor function. 3GX GOV LED will



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

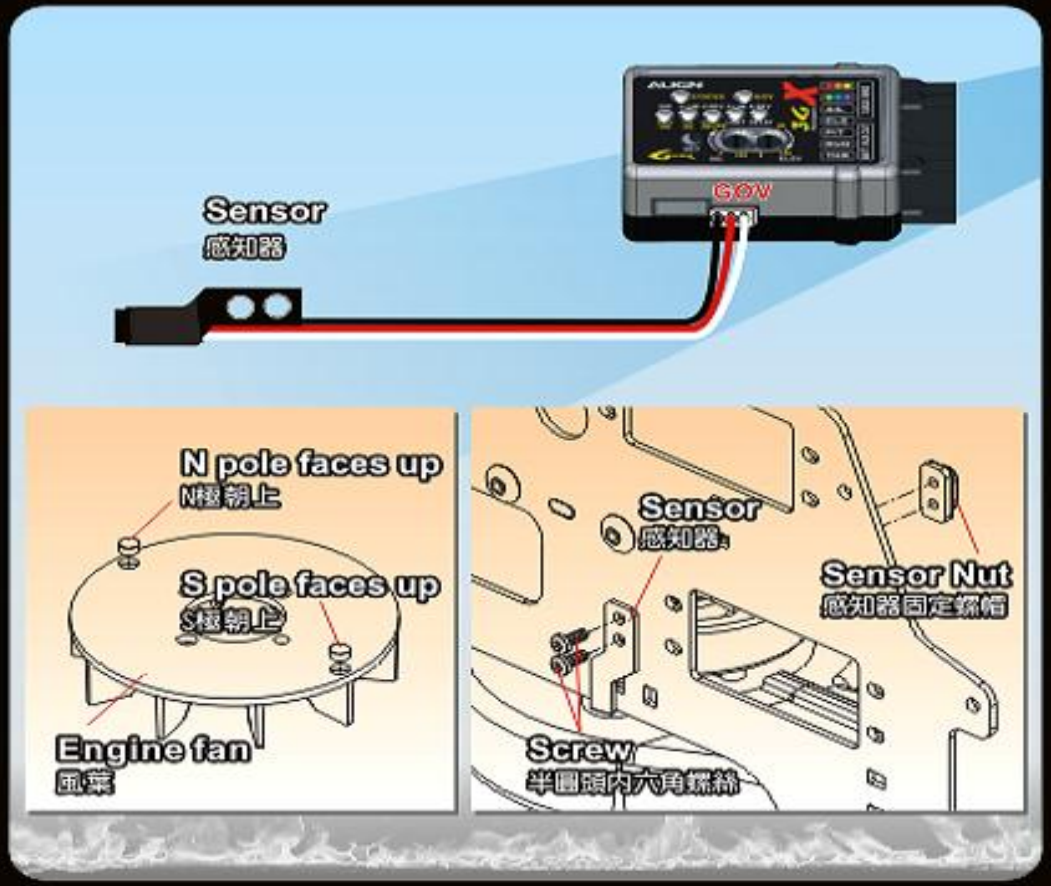
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyrosoope Settings | Governor Settings | Moc

Governor Connection | Entering Governor Settings | Governor Function Settings

Setting Instruction

enable/disable governor function. 3GX GOV LED will lit green when governor is active, red when inactive.

4. When satellite receivers are used, governor speed setting is done through channel 5.



Back | Next

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

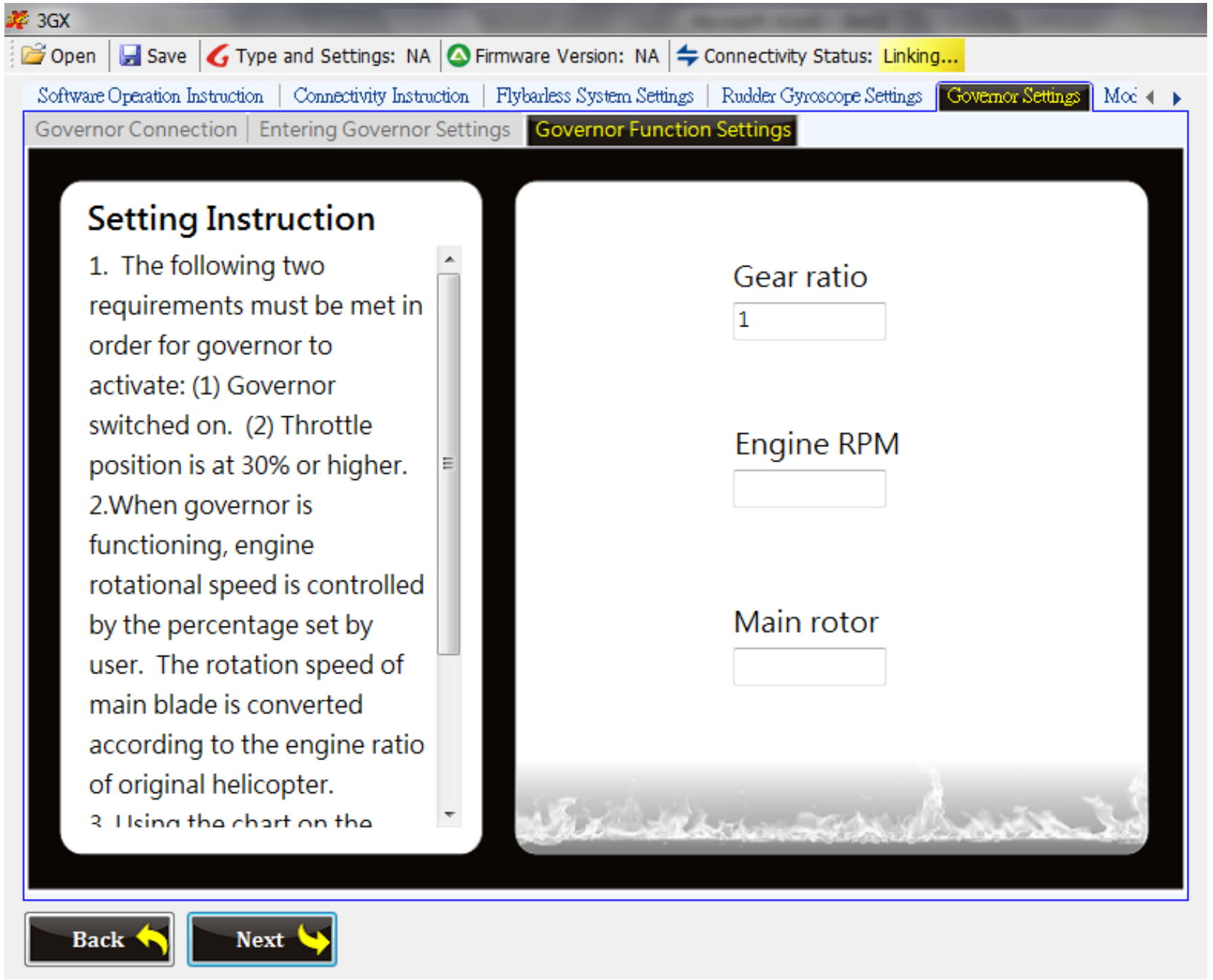
Software Operation Instruction | Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Moc

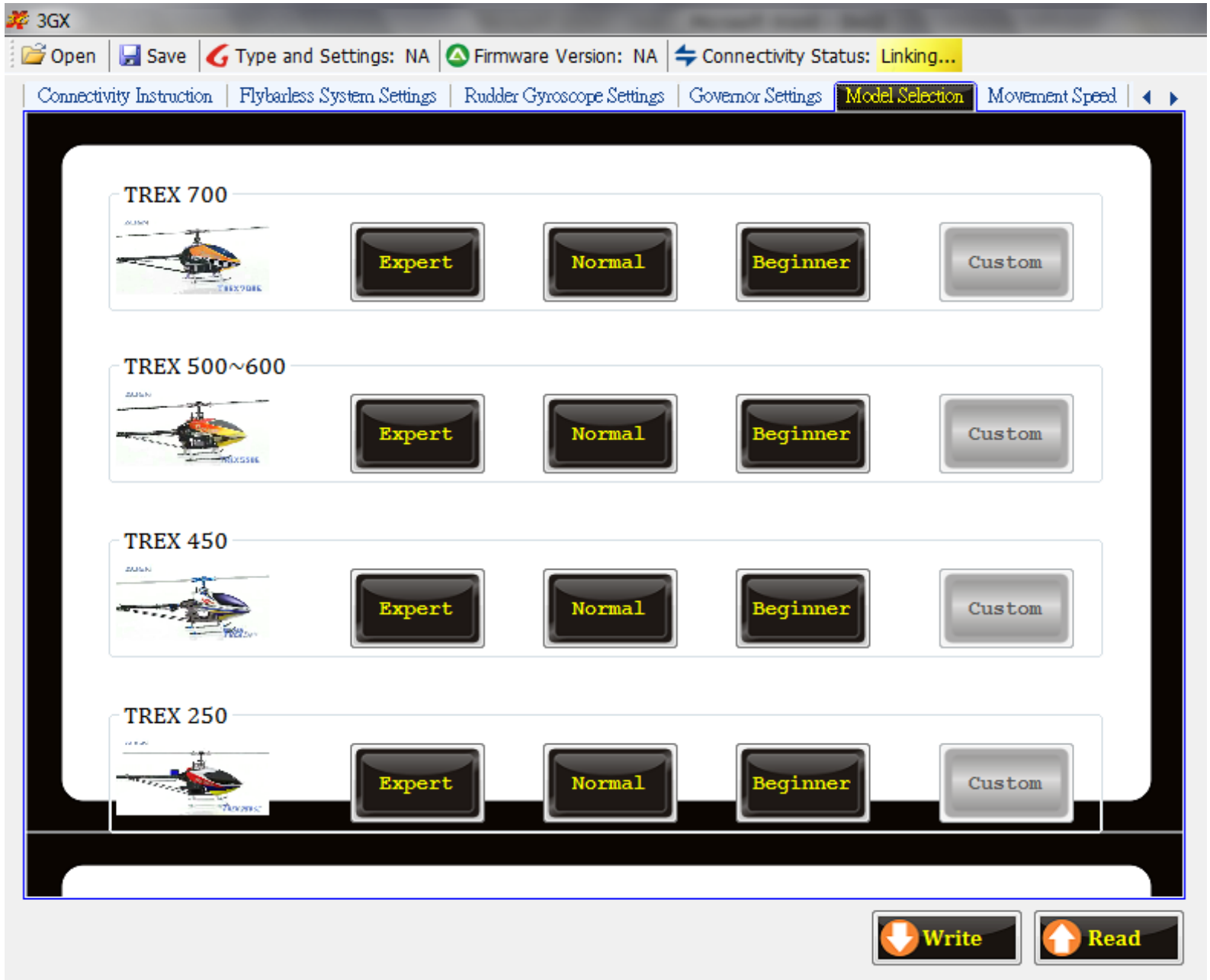
Governor Connection | Entering Governor Settings | Governor Function Settings

Setting Instruction

1. Confirm the transmitter is powered up, and throttle stick is at lowest position.
2. Press and hold the SET button while powering up the receiver until all 1~5 LED lights up. Release the SET button and GOV red LED will light up.
3. Push the throttle stick on transmitter to the maximum top, and in a few moments LED will go off and system power cycles, indicating the completion of setup process.

Back | Next


3GX
Open
Save
Type and Settings: NA
Firmware Version: NA
Connectivity Status: Linking...
Software Operation Instruction
Connectivity Instruction
Flybarless System Settings
Rudder Gyroscope Settings
Governor Settings
Governor Connection
Entering Governor Settings
Governor Function Settings
Setting Instruction
1. The following two requirements must be met in order for governor to activate: (1) Governor switched on. (2) Throttle position is at 30% or higher.
2.When governor is functioning, engine rotational speed is controlled by the percentage set by user. The rotation speed of main blade is converted according to the engine ratio of original helicopter.
Gear ratio
1
Engine RPM
Main rotor
Back
Next


3GX
Open
Save
Type and Settings: NA
Firmware Version: NA
Connectivity Status: Linking...
Connectivity Instruction
Flybarless System Settings
Rudder Gyroscope Settings
Governor Settings
Model Selection
Movement Speed
TREX 700
Expert
Normal
Beginner
Custom
TREX 500~600
Expert
Normal
Beginner
Custom
TREX 450
Expert
Normal
Beginner
Custom
TREX 250
Expert
Normal
Beginner
Custom
Write
Read

3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Connectivity Instruction | Flybarless System Settings | Rudder Gyroscope Settings | Governor Settings | Model Selection | Movement Speed

TREX 700

Expert | Normal | Beginner | Custom

TREX 500~600

Expert | Normal | Beginner | Custom

TREX 450

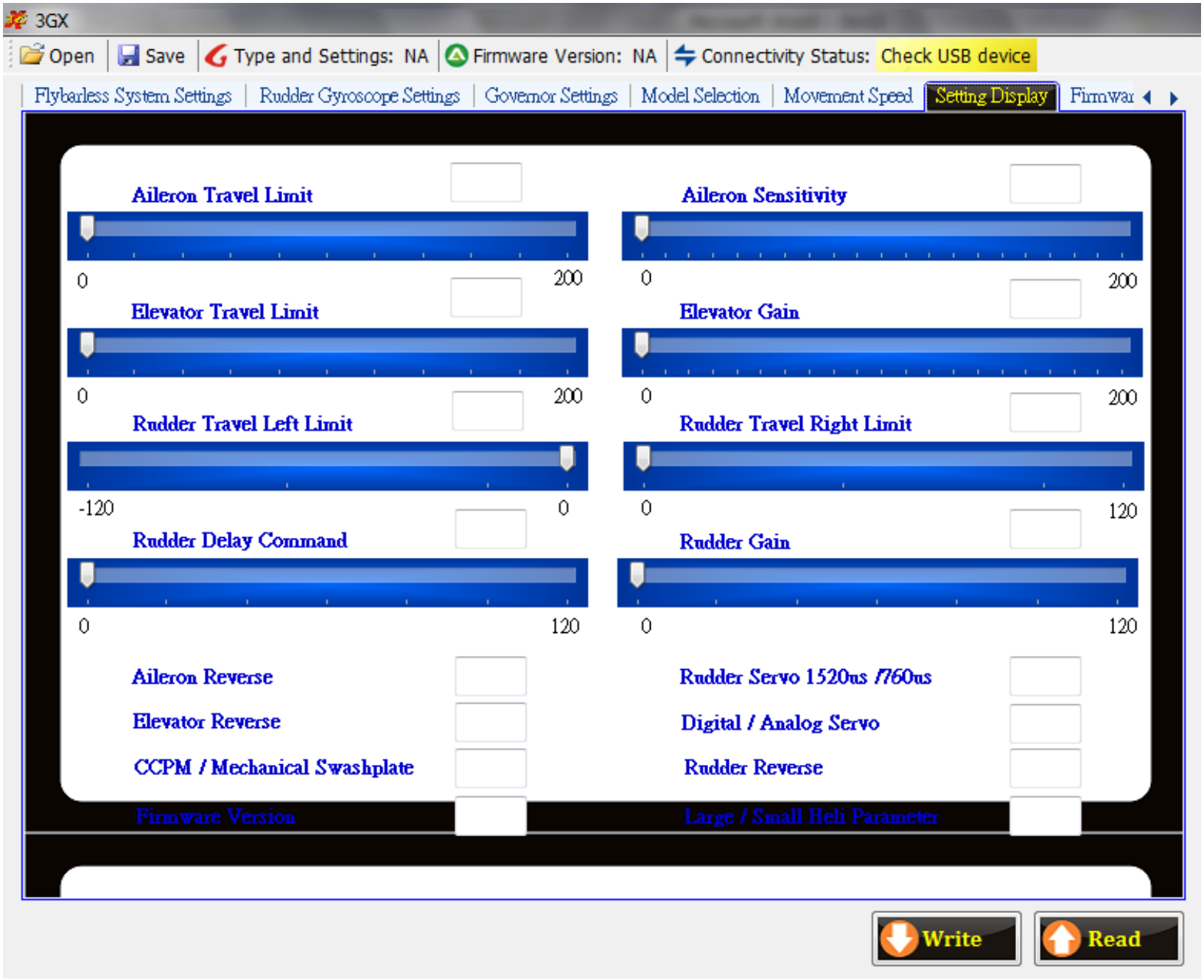
Expert | Normal | Beginner | Custom

TREX 250

Expert | Normal | Beginner

Write your p

Write | Read


3GX
Open
Save
Type and Settings: NA
Firmware Version: NA
Connectivity Status: Check USB device
Flybarless System Settings
Rudder Gyroscope Settings
Governor Settings
Model Selection
Movement Speed
Setting Display
Aileron Travel Limit
0
200
Aileron Sensitivity
0
200
Elevator Travel Limit
0
200
Elevator Gain
0
200
Rudder Travel Left Limit
-120
0
Rudder Travel Right Limit
0
120
Rudder Delay Command
0
120
Rudder Gain
0
120
Aileron Reverse
Elevator Reverse
CCPM / Mechanical Swashplate
Firmware Version
Rudder Servo 1520us /760us
Digital / Analog Servo
Rudder Reverse
Large / Small Heli Parameter
Write
Read

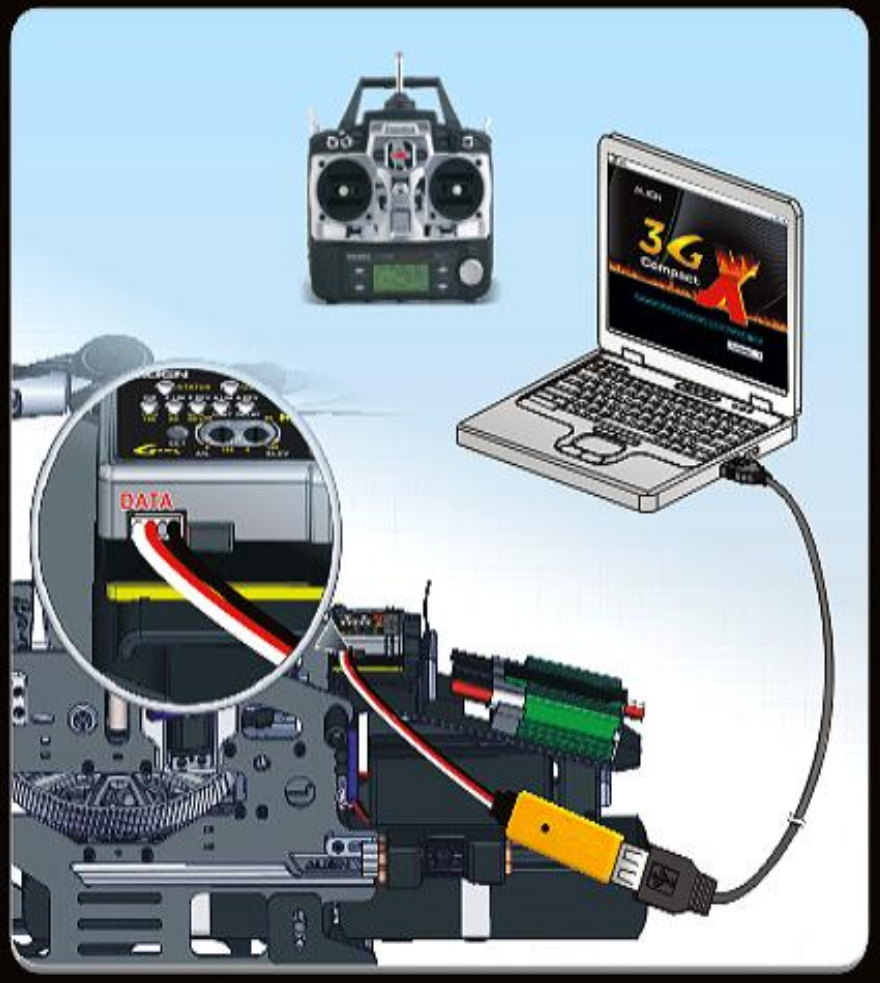
3GX

Open | Save | Type and Settings: NA | Firmware Version: NA | Connectivity Status: Check USB device

Rudder Gyroscope Settings | Governor Settings | Model Selection | Movement Speed | Setting Display | Firmware Upgrade

Caution

Proceeding to 3GX firmware upgrade. To ensure successful upgrade, use the included Align USB adaptor, and do not disconnect power during upgrade process. Failed upgrade could lead to possible hardware damage.



OK