Digital 6 Channel Proportional R/C System

T6EHP-E

Instruction Manual

For OEM helicopter only

IDLE-UP/GYRO Switch

Attention:

This switch is also for gyro sensitivity change.

Main features:

●Economic design to save OEM helicopter cost.

●Extremely low power consume, only 70mA current drain in the working condition.

●Stable control range : 500 meters ground.

●Easy Link technology will help you to synchronize the receiver and transmitter easy and fast.

●One combined IDLE-UP/GYRO switch design makes the 3D situation change more user-friendly. Only 1 switch operation rather than normally 2 switches(Idle-up and gyro switches) change movement while turning into 3D flying.

●Separated trim for each servo inside the LCD program(even for the CCPM setting)- you can freely adjust the neutral position of any channel(such as aileron, elevator..) separately, meanwhile the center position of all other channels won't be changed.

RadioLink

Thank you for purchasing the Radiolink digital proportional R/C helicopter system. If this is your first "computer" radio, rest assured that it is designed to make initial setup and field-tuning of your helicopter easier and more accurate than would be if using a "non-computer" radio. Although this is a beginner or sport system with the requirements of those flyers in mind, in order to make the best use of your Radiolink T6EHP-E and to operate it safely, you must carefully read all of the instructions .Suggestion: If, while reading the instructions, you are unclear of some of the procedures or functions and become "stuck," continue to read on anyway. Often, the function or procedure will be explained again later in a different way providing another perspective from which to understand it. Another suggestion is to connect the battery, switch and servos to the receiver and actually operate the radio on your workbench as you make programming changes. Then, you'll be able to see the effects of your programming inputs.

CONTENTS AND SPECIFICATION

Transmitter: T6EHP-E
T6EHPE Transmitter with 6-model memory.
Transmitting on 2.4GHz band
Operating system: 2-stick, 6-channel system
Modulation: FHSS
Power supply: 9.6V Ni-Cd battery or 12V alkaline battery
Current drain: 70mA

Receiver: R6EH
R6F narrow band, 2.4GHz 6 channel receiver
Receiving on 2.4GHz
Power requirement: 4.8V-6V
Current drain: 9.5mA@4.8V

INTRODUCTION TO THE RADIO SYSTEM

IMPORTANT!: Always turn on the transmitter first, then the receiver. When turning off the system, always turn off the receiver first. The object is never to have the receiver on by itself. Otherwise, the servos or control surfaces could be damaged, or in the case of electric-powered models, the motor may unexpectedly turn on causing severe injury.
IMPORTANT!: Never collapse the transmitter antenna by pushing down from the top. If one of the segments becomes momentarily stuck you may damage the antenna. Instead, collapse the antenna from the bottom, drawing in one segment at a time.
Transmitter
The LCD on the face of the compact, ergonomically-designed case is easy to read and allows rapid data input. The system also holds independent memories for six different models. The new, adjustable-length control sticks provide an improved feel. Dual rate (D/R), Idle up, Throttle hold, and Gyro sense can be operates by switch.
Transmitter controls
The diagram and explanations briefly describe the functions of the T6EHP-E transmitter.

Antenna

Neck strap hook

LCD screen

Idle up and Gyro Switch

Throttle Hold switch

Note : *When you change to the idle-up situation, the gyro sense will be changed to Idle setting too.*
So you don't need to operate 2 switch (Idle up and Gyro sense switches) while you want to fly 3D.

Aileron and Throttle control stick

Elevator and Rudder control stick

Trimmer(Mechanical)

ON/OFF switch

Select Button

Mode Button

Data Input Button

DESCRIPTIONS:

Throttle hold switch - This switch operates to hold the engine in the idling position and disengaged it from the Throttle stick. It is commonly use to practice auto-rotation.

Neck strap hook - Mounting point for optional neck strap.

Aileron/Throttle control stick - Operates the servos connected to channel 1 (aileron) and channel 2 (throttle) in the receiver.

Trim levers (all) - Used to shift the neutral or center position of each servo.

NOTE: The throttle trim lever is intended for fine tuning the throttle servo when the engine is at idle. Throttle trim does not affect the throttle servo when the throttle control stick is all the way up (so idle r.p.m. can be adjusted without affecting throttle settings through the rest of the stick movement)

DATA INPUT Button - Used to change the values of the various functions displayed on the LCD screen

Liquid - crystal display screen (LCD) - Displays programming modes and values entered.
MODE key - Used to scroll through different functions.

SELECT Button - Used to display the values for the current function.

Throttle/Rudder control stick - Operates the servos connected to channel 3 (throttle) and channel 4 (rudder) in the receiver.

Idle up(Gyro) switch - *This switch operates to change the flight condition which is set the throttle Curve and pitch curve of mid air maneuvers (rolls, loops, stall turns) and 3D flight. When you change the Idle up switch , the gyro sense will be changed to Idle setting too. So you don't need to operate 2 switch (Idle up and Gyro sense switches) while you want to change to 3D flying situation.*

Antenna - Radiates signals to the receiver. Never fly a model without fully extending the antenna or you may create interference to other modelers and decrease operational signal range of the transmitter. The antenna may be removed and replaced with another in case it is inadvertently broken.

RADIO INSTALLATION

Follow these guidelines to properly mount the servos, receiver and battery.

 Make certain the alignment tab on the battery, switch and servo connectors are oriented correctly and "keys" into the corresponding notch in the receiver or connectors before plugging them in. When unplugging connectors, never pull on the wires. Always pull on the plastic connector instead.

 Always mount the servos with the supplied rubber grommets. Do not over tighten the screws. No part of the servo casing should contact the mounting rails, servo tray or any other part of the helicopter structure. Otherwise, vibration will be transmitted to the servo causing premature wear and/or servo failure.

 Note the small numbers (1, 2, 3, 4) molded into each arm on the servo arms. The numbers indicate how many degrees each arm is "off" from 90 degrees to correct for minute manufacturing deviations from servo to servo.
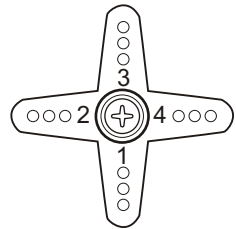
 To center the servos, connect them to the receiver and turn on the transmitter and receiver. Center the trims on the transmitter, then find the arm that will be perpendicular to the pushrod when placed on the servo.
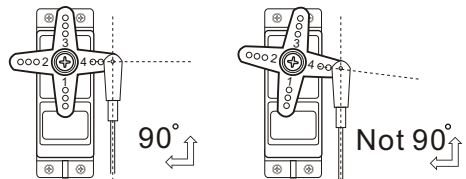
After the servos are installed, operate each servo over its full travel and check that the pushrods and servo arms do not bind or contact each other. Also make sure the controls do not require excess force to operate. If there is an objectionable buzzing sound coming from a servo, there is probably too much resistance in the control. Find and correct the problem.

Even if there is no servo damage, excess battery drain will result.

When you install the switch harness to the helicopter, please use switch cover. Generally sandwich the frame by switch and switch cover and securely tighten the screws. It might be different installations on model by model. In that case, please follow the model instruction manual

.

IMPORTANT: NEVER cut the receiver antenna or mount it in the model folded back on itself. Doing so will change its electrical length, possibly reducing the distance from the pilot that the model can be controlled ("range").

Internal antenna mounting:

You may run the antenna inside of a non-metallic housing within the fuselage, but range may suffer if the antenna is located near metal or carbon fiber pushrods or cables. Do not bind the antenna with servos, switch, battery harnesses. Be sure to perform a range check before flying.

External antenna mounting:

Please use rubber grommet or silicon tube to protect from cut or peel off insulation of antenna on the fuselage antenna-exiting hole.

Place the receiver antenna out from the fuselage part to the nonmetal tube installed in skid etc. Please keep antenna away from parts that made of metal and carbon graphite.

The receiver contains precision electronic parts. It is the most delicate radio component on-board the model and should be protected from vibration, shock and temperature extremes. To protect the receiver, wrap it in R/C foam rubber or other vibration-absorbing material. If appropriate, waterproof the receiver by placing it in a plastic bag and closing the open end

with a rubber band before wrapping it in foam. If moisture enters the receiver, intermittent operation or a failure may result.

Wrapping the receiver in a plastic bag also protects it from fuel and exhaust residue which, in some models, can work its way into the fuselage.
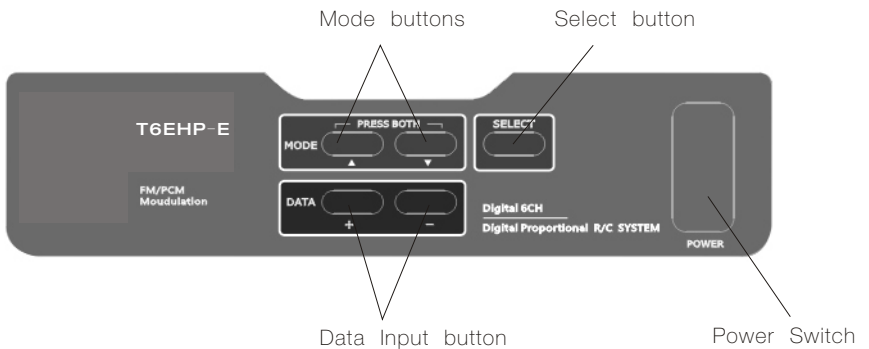
Connect the servos to the receiver to perform the functions indicated:

Receiver Output Channel	function	Receiver Output Channel	function
1	**Aileron**	5	**Gyro sensitivity**
2	**Elevator**	6	**Pitch**
3	**Throttle**	7	**Not used**
4	**Rudder**	B	**Receiver switch**
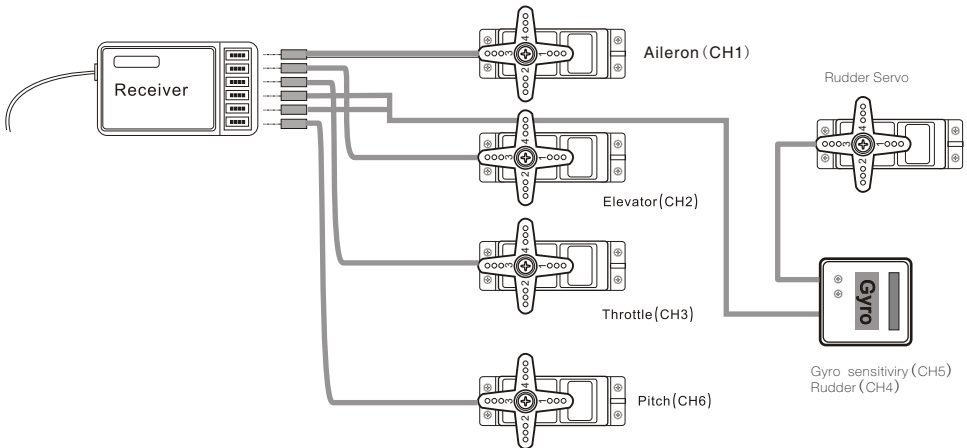
LCD DISPLAY SCREEN

LCD display screen

When the transmitter is initially turned on, the model memory number, model memory name, modulation type and transmitter battery voltage are displayed on the LCD screen. When prompted by the user, the functions and settings stored in the memory can also be read on the screen. The user access the different functions using the **MODE** and **SELECT** buttons and changes the values and settings using the **DATA INPUT** button.

Note: Feel free to explore by scrolling through the programs and viewing the displays by using the **MODE** and **SELECT** buttons. The **MODE** and **SELECT** buttons only determine what will be displayed on the screen and will not change any of the settings.
Only when using the **DATA INPUT** buttons will you be able to change any of the settings.

Model memory number and model name

The T6HP stores model memories for six models. This means all the data (control throws, trims, end points, etc.) for up to six different models can be stored in the transmitter and activated at any time (depending upon which model you choose to fly that day). This eliminates the requirement for reconfiguring the transmitter each time you decide to fly a different model with it! When the transmitter is turned on the model number, model name, modulation and the transmitter voltage will be indicated on the LCD screen. Before every flight **BE CERTAIN** that the correct model number for the model you intend to fly appears on the screen. If the transmitter is not operating the correct model, some (or all) of the controls could be reversed and the travels and trims will be wrong.

Flying a model with the wrong program will result in a crash, so always be certain the model number and model name in the transmitter is correct. One way to ensure this is to write the corresponding model number directly on the helicopter, or attach a list to the bottom or back of the transmitter.

Transmitter battery voltage

In addition to the model number, the LCD screen also displays the transmitter battery voltage. When the voltage goes below approximately **8.5 Volts** the "battery" icon will *flash* and the low-battery alarm will continuously beep until the transmitter is turned off. You should never allow the transmitter voltage to become this low while flying, but if it does, land immediately.
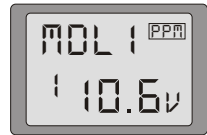
Note: When the transmitter voltage reads 8.9 Volts you will still have approximately ten minutes (or less) before losing operational range, so this is the recommended absolute minimum voltage. If the transmitter ever reaches **8.9 Volts,** land as soon as safely possible. A more reasonable margin of safety would be to quit flying for the day (or recharge the batteries) when the transmitter battery.

```
SUGGESTED GUIDELINES
9.4 Volts - No more flying until recharge.
8.9 Volts - Land as soon as safely possible.
8.5 Volts - Emergency- Land immediately!
```

Mixer alert warning

The Mixer alert warning is displayed to alert you whenever you turn on the transmitter with many of the mixing switches active. This warning will disappear when the offending switch or control is deactivated. Switches for which warnings will be issued at power-up are Throttle hold switch or Idle-up switch.

PROGRAMMING THE RADIO

Anytime you wish to view or change any of the current settings in the transmitter, the programming mode must first be entered by, of course, turning on the power, then by pressing the **"SELECT" "+" AND "-"** buttons simultaneously and holding them down for one second. Once in the program the MODE button will be used to scroll through functions (model number/ data reset/ model name, reversing, dual rates/ exponentials, end point adjustments, trim, normal throttle curve, normal pitch curve, idle-up throttle curve, idle-up pitch curve, throttle hold, revolution mixing, gyro sensitivity, and swashplate types) and the **SELECT** button will be used to view the settings within the function. When a data change is actually required the "**DATA INPUT**" button will be used to increase or decrease the value of the item displayed, thus making the change.

You can return to the home screen (where the model number and battery voltage is displayed) by pressing the **MODE** " ▲ " AND " ▼ " buttons simultaneously and holding them down for one second.

Note: The functions are listed and described in the order that they appear in the transmitter. Read all the way through the programming instructions before setting up your model (if you won't be using any of the mixing functions for a while you can read those instructions when ready). Refer to the

Model Select / Data Reset / Model Name

MODL Model select function

1. Access the Model select function in the programming mode (by pressing the **MODE** "▲ " and " ▼ " buttons simultaneously and holding them down for one second.). The number for the

current, active model will be blinking.

2. To activate a different model memory press the **DATA INPUT** button until the desired model   number appears.

3. Now the model has been selected. All programming inputs from this point forward will affect   only the model number on the screen
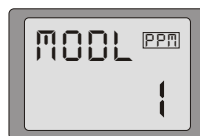
REST Data reset function

All the data for any model memory can be reset to the original factory defaults. Often this function is done to get a "fresh start" and clear the memory before inputting new model settings.

To reset data:

1. Access the Model Select function in the programming mode (by pressing the **MODE** and **SELECT** buttons simultaneously and holding them down for one second). Use the **DATA INPUT** button to select the model memory you wish to reset.

2. Once the desired model number is displayed on the screen, press the **SELECT** button. A "**REST**" will appear on the screen.

3. Press **DATA INPUT** "+" or "-" for about 2 seconds to clear and reset the memory.

"**CLR**" blinks first, and then it stops blinking with a sound. Now the model data is reset to the initial setting that is the default factory value.   The existing modulation and swashplate type settings are not reset. If the power switch is turned off while reset is underway, the data may not be reset.

CAUTION: Resetting the current model memory will permanently erase ALL programming information for that model. The data cannot be recovered (unless you recorded it on a Model Data Recording Sheet in the back of this manual). Do not reset the model unless you are certain you want to clear-out that memory and start from scratch.

When actually setting up a model you should have the model in front of you with the power on so you can actually see the effects of your programming inputs and measure the control throws.

Model name function

1. Access the Model Select function in the programming mode (by pressing the **MODE** " ▲ " and "▼" buttons simultaneously and holding them down for one second.). Use the **DATA INPUT** button to select the model number you wish to change.

2. Push **SELECT** button twice after seeing on the screen the model memory where you want to set the model name, then you will see the model name on the screen.

3. Choose a character for the first digit by using **DATA INPUT** buttons. Then move to the next digit by pressing the **SELECT** button and choose a character in the same way. Continue choosing characters for the third and fourth digits. You can use up to four characters for the name.

REVR Servo Reversing

The servo reversing function is used to change the direction that a servo responds to a control input from the transmitter (stick or switch). After using the reversing function, check all the controls on the model to be certain they are operating in the correct direction and that you did not inadvertently reverse a servo other than the one intended. Reversing the wrong servo (and not checking the response of the controls before each flight) may be the most common cause of a crash!

To reverse a servo:

1. Enter the programming mode and use the **MODE** button to access the **REVR** function.

2. Use the **SELECT** button to select the channel you wish to reverse.

3. Push the **DATA INPUT** "-"button to reverse the servo **(REV)**, or push the "+"button to make the servo operate normally **(NOR).** The arrow will indicate the condition of the servo(normal or reversed).

4. Use the **SELECT** button to display other channels to be

EPA End Point Adjustment

Note: Since changing the "end points" will also change the dual rates, the end points should be set prior to setting the dual rates. If you set the dual rates first, and then go back and change the end points, the dual rate throws will also change.

The control throws should be set up so that the "end points" are as near to 100% as possible.

If the EPA values must be set below 70% or above 120% to get the desired throw, you should strongly consider changing the pushrod connections so the values can be set closer to 100%.

To set the end points:

1. Enter the programming mode and use the **MODE** button to access the "EPA" screen. The channel number being adjusted will the left side on the screen and the "%" symbol will be flashing.

2. To change the RIGHT aileron throw move the aileron stick to the right, then push the **DATA INPUT** button up or down to change the value and the throw.

3. Move the stick to the left and use the **DATA INPUT** button to change the LEFT aileron throw.

4. Use the **SELECT** button to display the other channels and set the other end points. Notice that moving the stick (or switch or dial) from one end to the other changes the value displayed and the position of the arrow for that "end" of the control input.

At 100%
1-4ch 40˚
5-6ch 55˚

0-120%

At 120%
1-4ch,50˚
5-6ch,60˚

EPA PPM
CH %
1100
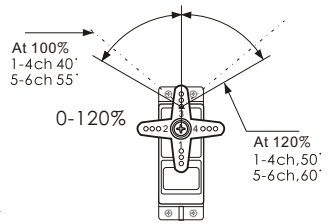
TRIM Trim Settings

There are four trim levers ("trims") on the front of the transmitter. Three of the trims are for adjusting the neutral position of the aileron, elevator and rudder servos. The fourth trim is for setting the idle r.p.m. of the engine when the throttle stick is all the way down. The intended use of the trims is to make small servo adjustments, in flight, to get the model properly "trimmed" (so it will fly straight-and-level). Because the trims are intended to be used while the model is in flight, you do not have to "enter the program" to adjust the trims. Simply push or pull on the trim levers while flying and the neutral position of the servos will shift. Keep in mind that you should start out with the control surfaces centered when the servos are centered and the trims are "zeroed" (or near zero). THEN you can adjust the trims once airborne.

Center the servos:

1. Turn on the transmitter and receiver. Operate the controls to make sure the servos respond in the correct direction. Use the reversing function to reverse any servos necessary.

2. Center the throttle control stick.

3. Place the servo arms on the servos so they are perpendicular to the pushrods, It is okay to cut off any unused servo arms.

4. **Connect the pushrods to the control surfaces. Adjust the length of the pushrods until the control surfaces are centered when the servos are centered. While there's small inaccuracy of the servo which cause the unbalance of the control surface, you can used the related servo trims to change the neutral position of each servo separately, not like other CCPM system, it's separated trim but not linkage trim like Futaba's system. Which will be very convenient for CCPM swashplate control surface setup.**

To adjust the trim settings:

Once the servos and control surfaces have been connected and the control throws have been set using the end points and dual rates, get the model airborne. Adjust the trims as necessary to get the model to fly straight-and-level. If much trim is required on any one control it is a good idea to readjust the pushrods so the trims can be returned to neutral (zero). Adjusting the trims with the trim levers changes the servo's position in increments of "4." If finer adjustments are required, land the model, then enter the program as described below to adjust the trims in increments of "1."

1. Enter the programming mode and use the **MODE** button to activate the **TRIM** menu.
2. Press the **SELECT** button to display the channel to be adjusted (the figure shows trim adjustment for CH1).
3. Adjust the trim using the **DATA INPUT** button. Note that initially, the values change in increments of "1,"but if the **DATA INPUT** button is held long enough the values will change more rapidly.
4. Repeat the steps for other channels that require trim adjustments.

TRIM PPM
CH 1 + 0

9

N-TH Normal throttle curve function

Used to set throttle curve for normal flight. 5-point throttle curve is utilized to best match the blade collective pitch to the engine RPM for consistent load on the engine. Throttle curve can be adjust from 0-100% each point.

This normal throttle curve create basic curve for around hovering. Use this function together with the normal pitch curve (see Normal pitch curve) so that up/down control has a constant engine speed.

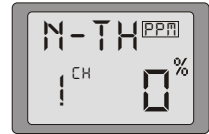### To set the normal throttle curve:

1. Enter the programming mode and use the **MODE** button to access the **"N-TH"** function.

Throttle stick position number will appear on left side of display and "%" symbol will be flashing.

2. Use **SELECT** button to select the desire curve point. Point 1 is shown initially which is throttle stick all the way downward (slow) position. Point 5 is throttle stick all the way upward (hi) position.

3. Push **DATA INPUT** button to set the servo position.

4. Use SELECT button to set other points with same manner.

N-PI Normal pitch curve function

Used to set pitch curve for normal flight. 5-point pitch curve is utilized to best match the blade collective pitch to the engine RPM for consistent load on the engine. Pitch curve can be adjust from 0-100% each point.

This normal pitch curve create basic curve for around hovering. Use this function together with the normal throttle curve so that up/down control has a constant engine speed.

To set the normal pitch curve:

1. Enter the programming mode and use the **MODE** button to access the **"N-PI"** function. Throttle stick position number will appears on left side of display and "%" symbol will be flashing.
2. Use **SELECT** button to select the desire curve point. Point 1 is shown initially which is throttle stick all the way downward (slow) position. Point 5 is throttle stick all the way "+" (hi) position.
3. Push different **DATA INPUT button** to set the servo position.
4. Use **SELECT** button to set other points with same manner.

I-TH Idle-up throttle curve function

Used to set throttle curve for idle up flight. 5-point throttle curve is utilized to best match the blade collective pitch to the engine RPM for consistent load on the engine when idle up function is on. Throttle curve can be adjust from 0-100% each point.

This idle up throttle curve is to set for consistent engine RPM and can be activated at any time when mid air maneuvers are executed, such as loops, rolls, and 3D flight even when reduced the blade

1. Enter the programming mode and use the **MODE** button to access the **"I-TH"** function.

2. Push the **DATA INPUT "+"** button **"-"**. This will cause the flashing "INH" display to change to a flashing **"ON"** display. Now the I-TH function is on. Push the **SELECT** button, throttle stick position number will appears on left side of display and "%" is blinking.

3. Use **SELECT** button to select the desire curve point. Point 1 is shown initially which is throttles stick all the way downward (low) position. Point 5 is throttles stick all the way upward (high) position.

4. Push different **DATA INPUT** ″+″ or ″-″ buttons to set the servo position.

5. Use **SELECT** button to set other points with same manner.

I-PI Idle-up pitch curve function:

Used to set pitch curve for idle up flight. 5-point pitch curve is utilized to best match the blade collective pitch to the consistent engine RPM when idle up is used. Pitch curve can be adjusted from 0-100% each point.

The high side pitch curve should be set to not to over load the engine and keep consistent engine RPM. Generally set less pitch than normal maximum pitch. The low side pitch curve is to set for desired maneuver such as loops, rolls, and 3D flight.

To set the idle-up pitch curve:

1. Enter the programming mode and use the **MODE** button to access the "I-PI" function.

2. Push the **DATA INPUT "+"** button. This will cause the flashing "INH" display to change to a flashing "ON" display. Now the **I-TH** function is on. Throttle stick position number will appear on left side of display and "%" symbol will be flashing.

This function cannot be used when "I-TH" function is not activated. When you set "I-PI" function, you must activates "I-TH" function.

3. Use **SELECT** button to select the desire curve point. Point 1 is shown initially which is throttles stick all the way downward (slow) position. Point 5 is throttles stick all the way upward (hi) position.

4. Push **DATA INPUT** "+" or "-" buttons to set the servo position.

5. Use **SELECT** button to set other points with same manner.

HOLD Throttle hold function

Throttle hold function is to be used for auto-rotations where only pitch control is used to make a descent and landing. Just flip the hold switch on to set the engine in the idling or cut position and disengaged it from the Throttle Stick. It can be set from (-)50 to (+)50% from throttle trim position.

To set the throttle hold:

1. Enter the programming mode and use the **MODE** button to access the "HOLD" function.

2. Push the **DATA INPUT** button "+". This will cause the flashing "INH" display to change to a flashing "ON" display. Now the "HOLD" function is on.

3. Push **SELECT** button once. This will cause the flashing **"%"** symbol on the display. Pull the switch to the low position. Push up or down **DATA INPUT** button to set the throttle servo position of throttle hold.

```
HOLD PPM
    ON
```

To Turn off the throttle hold:

In the throttle hold programming mode , Press **"SELECT"** once, this will cause the flashing **"ON"** display. Then press **"-"** button, the screen will turn into **"INH"**. Now the **" HOLD"** function is off.

```
ITH  PPM
 +
 -    0 %
```
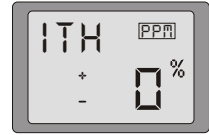
REVO Pitch-rudder mixing function

This mix adds rudder in conjunction with pitch. This helps compensate for rotation of the helicopter caused by the increased engine torque. (Never use revo. mixing with a heading-hold/AVCS gyro which is in heading hold/AVCS mode. However, revo mixing is still used when a heading-hold/AVCS gyro is in normal mode.)

To set the REVO mixing:

1. Enter the programming mode and use the **MODE** button to access the **"REVO"** function.

2. Push the **DATA INPUT "+"** button. This will cause the flashing **"INH"** display to change to a flashing **"ON"** display. Now the **"REVO"** function is on.

```
REVO PPM
  INH
```

3. Push the **SELECT** button once. This will cause the flashing "%" symbol on the display. It can be set mixing amount on throttle stick hi side and low side separately. When you move the throttle stick to the low side from neutral, the arrow indicates down direction and than push **DATA INPUT "+" or "-"**buttons to set the mixing amount of the low side. When you move the throttle stick to the high side from neutral, the arrow indicates up direction and than push **DATA INPUT"+" or "-"** buttons to set the mixing amount of the low side.

```
REVO PPM
   ON
    ON
```

```
REVO PPM
▲  ON
▼  -   0 %
```
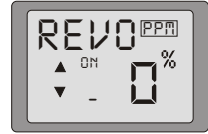
To turn off the REVO mixing

In the **REVO** mixing display statue, Press **SELECT** button to make the **ON** symbol flashing, Push the **"-"** button, flashing **"ON"** will change to a flashing **"INH"** , Now the **REVO** mixing is off.

GYRO Gyro mixing function

Gyro mixing function is use for adjusting the gain of the gyro and selecting the gain from two different gain settings by switch on the transmitter with the gyro that can set two different gains witch placed on the model.

To set the GYRO mixing:
1. Plug the gyro's sensitivity adjustment to channel 5 of the receiver.
2. **EPA** of channel 5 (see page 11-12) to set 100% both UP and DOWN.
3. Enter the programming mode and use the **MODE** button to access the "GYRO" function.
4. Push the **DATA INPUT "+"** button. This will cause the flashing **"INH"** display changing to a flashing **"ON"** display. Now the mixing is on.

```
GYRO PPM
  INH
```
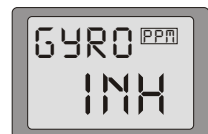
5. Push the **SELECT** button once. This will show the gyro gain setting and flashing "%" symbol on the display.
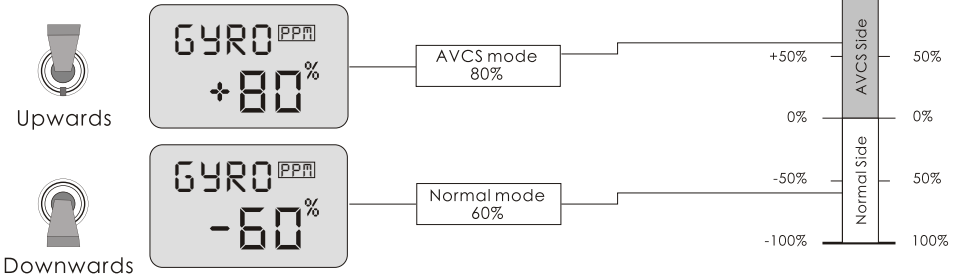
```
GYRO PPM
   ON
```

Flip the gyro (CH5) switch up and down. This will cause the arrow points up and down on the display simultaneously with switching operation and show the position of the switch. Push **DATA INPUT "+" or "-"** button to set the gyro gains both switch up and down position. Gyro gain can be adjust from -100% to +100%.

```
GYRO PPM
 +
 -    0 %
```

Relationship between radio setting value and gyro sensitivity.

Transmitter set value   Gyro sensitivity

IDLE-UP/GYRO SWITCH

```
GYRO PPM
 +80 %
```

Upwards

```
GYRO PPM
 -60 %
```

Downwards

AVCS mode 80%

Normal mode 60%

|	Transmitter set value	Gyro sensitivity
AVCS Side	+100%	100%
	+50%	50%
	0%	0%
Normal Side	-50%	50%
	-100%	100%

SWSH Swashplate types selection & Swash AFR

This function can chose from two swashplate types. Swash AFR can be set, if you chose 3-S type.

1-S: Independent aileron, pitch and elevator servos linked to the swashplate. Most kits are 1-S type.

3-S: With Aileron inputs, the aileron and pitch servos tilt the swashplate left and right; with Elevator inputs, the three servos tilt the swashplate fore and aft; with Pitch inputs, all three servos raise the swashplate up and down.

3-S Type

Pitch (Aileron)   Aileron (Pitch)

Elevator
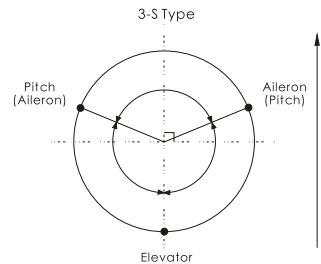
To select the swashplate types:

1. Enter the programming mode and use the **MODE** button to access the **"SWSH"** function.

2. Use **DATA INPUT** button to select swashplate type. When you want to choose **"1-S"**type, Press **DATA INPUT "+"**button. When you want to choose "3-S" type, Press **DATA INPUT "-"**button. When you are changing swashplate type to 1-S, or 3-S, the 1-S, or 3-S on the display flashes slow to change rapid and then stop flashing to show 1-S, or 3-S solid with conformation sound.

3. Now it set the swashplate type.

```
SWSH PPM
  1-S
```

```
SWSH PPM
  3-S
```

13
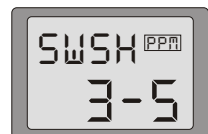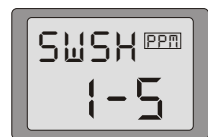
To set the swash AFR:

This function only can set when you selected the **3-S** swashplate type. There is no swash AFR setting with **1-S** type. This swash AFR function is for change the direction and amount of servo movement on aileron, elevator, and pitch.
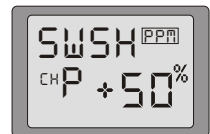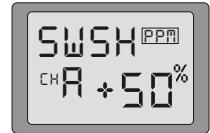
At first, linkage and set the servo horn length on aileron, elevator, and pitch servos follow by instruction manual comes with the model. Basically "EPA" is set near 100% with these three servos. To set the servo "reverse" function so that swashplate keeps horizontally and moves correct direction up and down by operating pitch control (up and down throttle stick).

1.Enter the programming mode and use the **MODE** button to access the **"SWSH"** function.
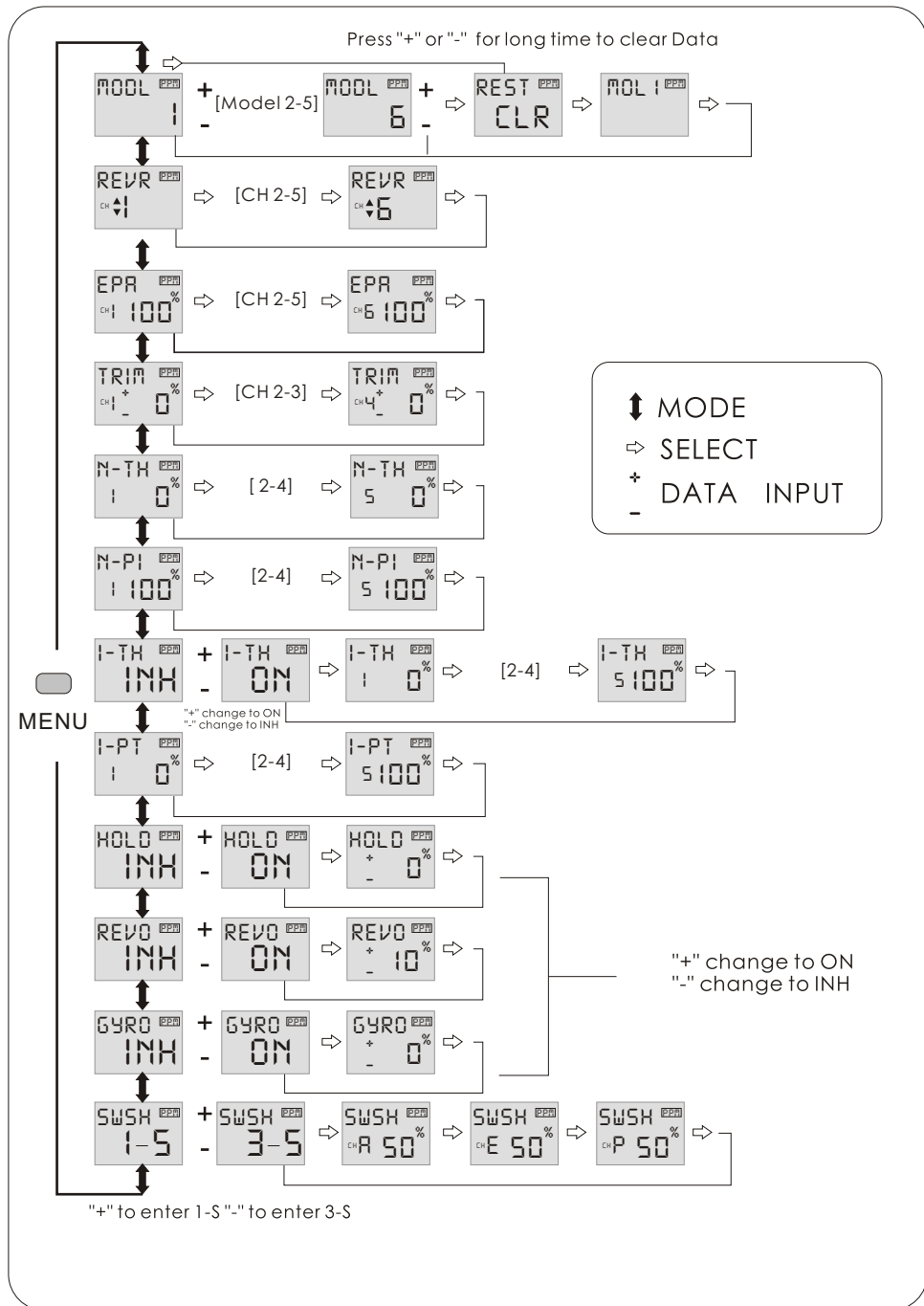
2. Swashplate types, Confirm **3-S** type is selected. If **3-S** type is not selected, please refer to "To select the swashplate types" and set.

3. Use **SELECT** button to select the channel you wanted to set. Aileron channel **"CHA"** is displayed at first and "%" is flashing. Move the aileron stick left and right to set the direction and amount of movement on the aileron servo by push up or down **DATA INPUT** button. Aileron movement can be adjusted from -100% to +100% .

4. Other channel (elevator and pitch) select by **SELECT** button to set the direction of movement and movement amount of servo with same manner of aileron channel setting. **"CHE"** is elevator and **"CHP"** is pitch channel on the display.

Press "+" or "-" for long time to clear Data

MODL 1

+ [Model 2-5] - MODL 6 + - REST CLR MOL 1

REVR ▲▼1 [CH 2-5] REVR ▲▼6

EPR CH1 100% [CH 2-5] EPR CH6 100%

TRIM CH1 +- 0% [CH 2-3] TRIM CH4 +- 0%

N-TH 1 0% [2-4] N-TH 5 0%

N-PI 1 100% [2-4] N-PI 5 100%

I-TH INH + - I-TH ON "+" change to ON "-" change to INH I-TH 1 0% [2-4] I-TH 5 100%

I-PT 1 0% [2-4] I-PT 5 100%

HOLD INH + - HOLD ON HOLD +- 0%

REVO INH + - REVO ON REVO +- 10%

GYRO INH + - GYRO ON GYRO +- 0%

SWSH 1-S + - SWSH 3-S SWSH CHA 50% SWSH CHE 50% SWSH CHP 50%

"+" change to ON
"-" change to INH

"+" to enter 1-S "-" to enter 3-S

↕ MODE
⇨ SELECT
+ - DATA INPUT

Trainer function (student only)

The T6EHP-E trainer function lets you practice flying as student by connecting the T6EHP-E to the instructor's transmitter. When two radios are connected with the trainer cord, they are both capable of operating the model, but it's usually best for the instructor to hold the radio that has been setup for the plane to be flown (as it is already programmed to fly the model). When the instructor holds the trainer switch on his radio, the student will have control. When the instructor wishes to regain control he simply releases the switch. Then he will have immediate, full control.

Changing the T6HPE-E stick mode

The transmitter may be operated in four different stick "modes" (1, 2, 3 & 4). The modes determine the functions that will be operated by control sticks. Currently, the transmitter is in "mode 2" and should be left in mode 2 unless you are an experienced flyer and have learned to fly in a different mode.

To change the mode, simultaneously push the **MODE** and **SELECT** buttons, then turn on the power. The current mode will appear on the LCD screen. Push the **DATA INPUT** lever to change the mode. If a mode is selected that moves the throttle control to the right stick, the throttle detent mechanism will have to be moved as well.

SYNCHRONISING A NEW TRANSMITTER/RECEIVER

If you replace the receiver or transmitter for your Helicopter, you will need to re-establish a link between the two units by synching them, which is a very straightforward procedure.

To synchronize you should do the following:

1. Remove the canopy so that you can access the receiver

2. Switch on the transmitter, ensuring that the helicopter is in Normal but not Idle up mode. and then put the throttle control stick is at its lowest position

3. Connect the Li-Po battery to the helicopter and wait until the LED on the receiver glows solid

4. Whilst holding the helicopter tightly, press and hold the switch (see illustration) on the receiver for approximately 5 seconds until you here the servos in the helicopter twitch this signifies that the helicopter and transmitter are now synchronized and you can fly normally.

Synchronising Switch (ID SET)

Digital 6 Channel Proportional R/C System

T6EHP-E

Instruction Manual

For OEM helicopter only

RadioLink