hitec

PRISM 7
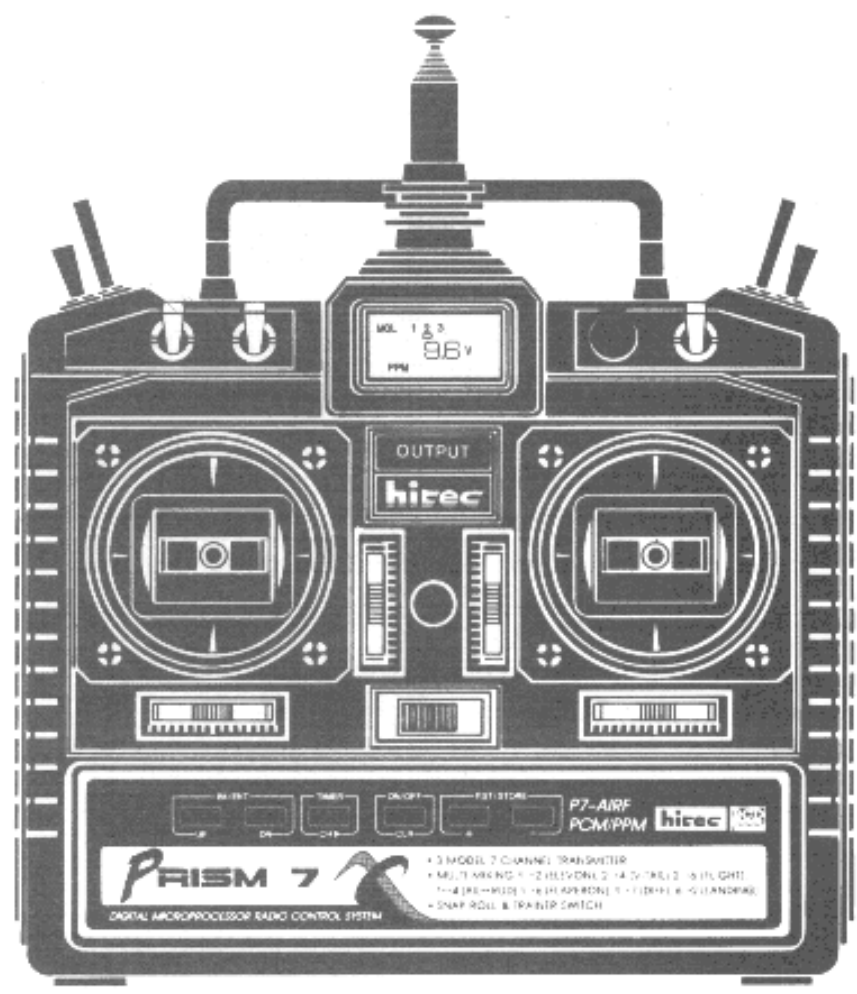
DIGITAL
MICROPROCESSOR
RADIO CONTROL SYSTEM
—PCM/PPM

OPERATION
MANUAL
3MODEL 7 CHANNEL
MULTI MIXING
SNAP ROLL &
TRAINER SWITCH

PRISM 7

DIGITAL MICROPROCESSOR RADIO CONTROL SYSTEM

PRISM 7 X

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INTRODUCTION

While maintaining the simplicity and ease of operation found in the original Prism 7 radio, the **Prism 7X** represents a significant step forward in computer radio technology. By adding two switches and making a few small changes in the programming, Hitec has been able to extend the number of user friendly functions to suit even the most demanding flier. These enhancements include aileron/rudder mixing, elevator/flap mixing and full trainer capability.

At the same time, we have managed to maintain our straight forward, two loop menu which allows quick and easy access to all of the radio's computer functions. The non-volatile memory of our E2PROM chip provides memory storage for three separate models for up to 10 years without use of a back up battery. Everything that made the original Prism 7 easy to work with has been retained in the new Prism 7X.

Please take the time to read through this manual and familiarize yourself with all the features and benefits of the Prism 7X system. It will allow you to take full advantage of the versatility provided by our digital programming and will make your flying time that much more enjoyable.

NOTE: Prior to actually utilizing the radio system, make sure that the transmitter and receiver batteries are charged up. While reading through this manual, you may want to begin placing the radio system on charge in anticipation of use during this familiarization period.

FEATURES AND SPECIFICATIONS

TRANSMITTER

- 7 channel microprocessor controlled system
- PCM or PPM (Standard FM) transmission modes
- Programmable for positive or negative PPM shift
- Memory for 3 separate models
- Model copy function
- In flight timer and alarm (Audible)
- Programmable stick mode function
- Low battery power warning for the transmitter (Audible)
- End Point Adjustments for all channels.
- Dual rates for channels 1, 2 & 4
- Exponential rates for channel 1, 2 & 4
- Sub trim capability for all channels.
- Trim Memory for channels 1,2,3, and 4.
- Trim Rate Adjustment for channels 1,2 & 4
- Trim Reset function
- Snap Roll switch (4 Directions possible)
- Landing Attitude switch
- Aileron/rudder coupling switch
- Elevator/flap coupling switch
- Programmable mixing functions (Elevon, V-tail, Flaperon, Etc.)
- Trainer jack and switch
- Fail Safe mode for PCM
- Master Data Reset function

Power Supply : 9.6 V (8 Cell Nicad)
Power Consumption : 200 mA

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RECEIVER

- Dual Conversion FM type. (PCM version has PCM type receiver)
- Ultra Narrow bandwidth for maximum sensitivity and adjacent channel signal rejection.
- Minimized 2nd and 3rd order intermodulation interference.
- Highly resistant to metal-to-metal noise

Intermediate Frequency	:	455 KHz, 10.7 MHz
Power Requirement	:	4.8 V (4 Cell Nicad)
Current Drain	:	22 mA (Receiver only)
Dimensions	:	58.6X35.2X21.5mm (2.3"X1.4"X0.8")
Weight	:	38g (1.34 oz)
Receiver Range	:	3,000 ft. or greater in the air
Operating Voltage	:	3.7 - 7.0 volts DC

SERVOS (HS-422)

- Dual Oilite bushings for long life and low wear
- Indirect drive gear train strengthens and protects gears
- Hitec custom IC features narrow dead band and high resolution
- SMT (Surface Mount Technology) components for reliability
- Precision cut servo gears ensure minimum backlash with high resolution

Control Compatibility	:	Pulse Width (1550 μ -S/N)
Maximum Deflection	:	45° +/- from center
Current Drain	:	8 mA at idle (6.0 V power)
Output Torque	:	3.1Kg/cm (43.4 oz/in)
Operating Speed	:	0.20 sec/60°
Dimensions	:	41X20X36.5mm (1.6"X0.8"X1.4")
Weight	:	45.5g (1.6 oz)

SYSTEM LAYOUT

ANTENNA

LCD DISPLAY

SNAP ROLL/TRAINER S/W
(MODE1=AIL → RUD MIX S/W)

GEAR S/W
(MODE1=AUX2, RUD D/R S/W)

FLIGHT MODE S/W
(MODE1=AUX1)

ELEV D/R S/W

AIL → RUD MIX S/W
(MODE1=SNAP ROLL/TRAINER S/W)

AUX2, RUD D/R S/W
(MODE1=GEAR S/W)

AUX1
(MODE1=FLIGHT MODE S/W)

AIL D/R S/W

OUTPUT

NECK STRAP EYELET

THRO/RUD (MODE 2)
ELE/RUD (MODE 1)

THROTTLE / TRIM
ELEVATOR

RUDDER TRIM

AIL / ELEV(MODE 2)
AIL / THRO(MODE 1)

ELEVATOR / TRIM
THROTTLE

POWER S/W

AILERON TRIM

P7-AIRF
PCM/PPM hitec

PRISM 7
DIGITAL MICROPROCESSOR RADIO CONTROL SYSTEM

INPUT KEYS

A.CHANNELS
- Channel 1 : Aileron
- Channel 2 : Elevator
- Channel 3 : Throttle
- Channel 4 : Rudder
- Channel 5 : Retractable Landing Gear (non-proportional)
- Channel 6 : Auxiliary Channel(Flap, Air Brake, Etc.-proportional)
- Channel 7 : Auxiliary Channel(Flap, Air Brake, Etc.-non-proportional)

NOTE : The following positions are based on Mode II setting

The four primary channels are found in the normal position on the sticks of the transmitter Channel 5, the non-proportional landing gear switch, is located on the top right corner of the transmitter, closest to the front of the transmitter face. Behind the gear switch   is the trainer/snap roll switch. Channel 6, a proportional auxiliary channel, is a dial switch located on the upper front face of the transmitter, just to the left of the LCD display panel. Channel 7, a non-proportional auxiliary channel, is located on the left corner of the transmitter, closest to the transmitter face. It also serves as the channel 4 dual rate switch. Behind it is the aileron/rudder coupling switch.
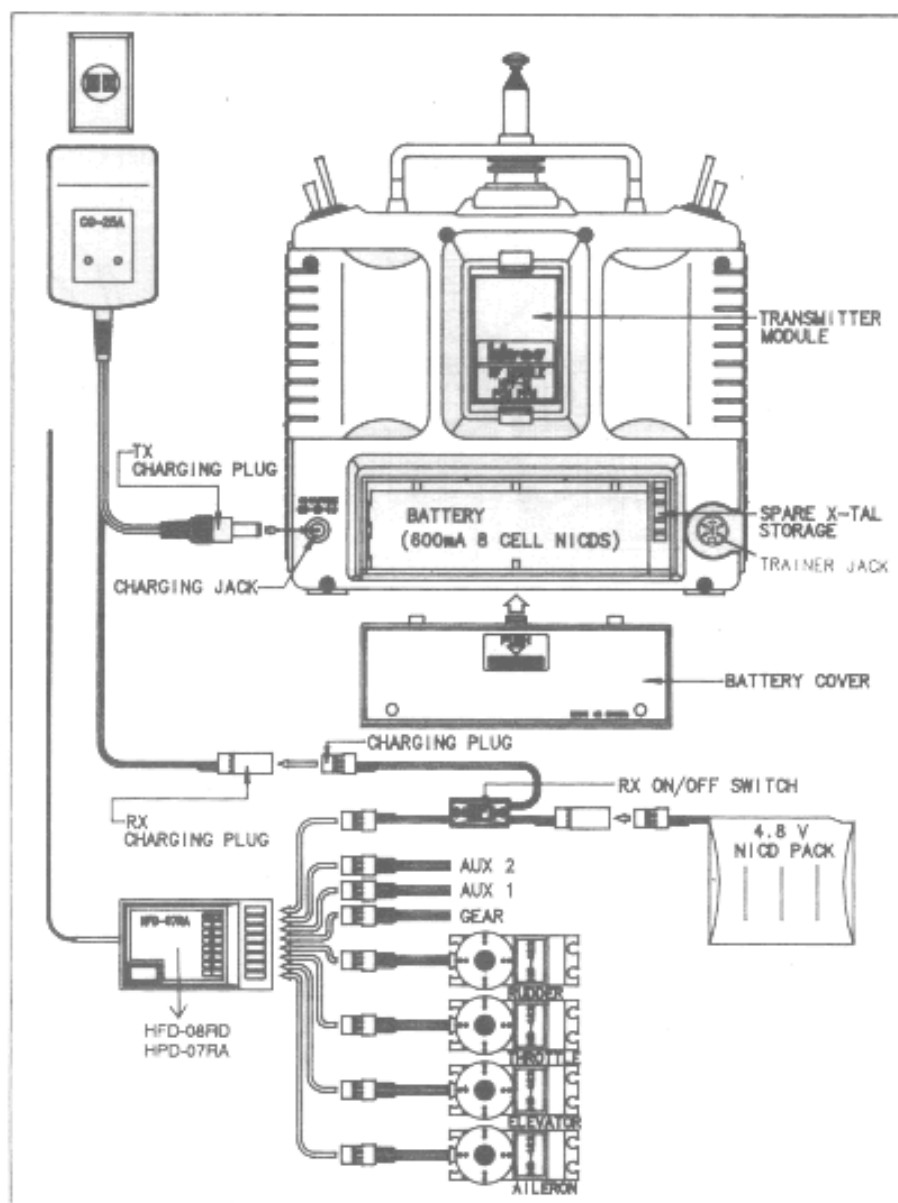
The dual rate switch for ailerons is located in the upper right corner of the transmitter face and for the elevator, the switch is located in the upper left corner of the transmitter face. All data input keys for the system are located on the lower portion of the transmitter. The transmitter sticks are adjustable in length via threaded stick posts.

B. CHANGING FREQUENCY (Spectra PLL is currently available in USA only)

If you wish to change frequency on the Prism, you need to replace the Rf module located in back of the transmitter. It is available as an optional part from your dealer. For even greater flexibility, Hitec now offers the Spectra PLL module which will allow to dial in any of the 50 available frequencies from one module. (Some countries allow user to change the transmitter X-tals. When doing this, make sure to use genuine Hitec X-tals only)

Please do not forget to change your receiver crystal to the new frequency of your transmitter.

C. CHARGING INSTRUCTIONS

The transmitter and receiver batteries need to be fully charged prior to operation of the system. Please use the AC charger provided with this system to charge both batteries at the same time. Plug the charger into the wall socket. Turn the transmitter and receiver switches to the off position. Plug the transmitter charge plug into the charge jack of the transmitter. Connect the charging plug of the switch harness to the receiver charge connector. Make sure both LED lights of the charger are lit up. Re-check connections if they do not come on.

Initial charging should last at least 16 hours. re-charging there after should last about 10 hours before each use of the system.

D. SAFETY CHECKLIST

1. Carefully check to ensure that all connectors are properly seated when you connect servos, batteries and the switch harness to the receiver.

2. When turning on the system, always turn the transmitter on first, then the receiver. When turning the system off, turn the receiver off first and then the transmitter. This will prevent the reception of an unwanted and possibly harmful radio signal from stray sources.

3. Check to see that all servo movement corresponds to the control stick movement. Improper servo direction can be corrected through the Servo Reverse menu in the Main Edit Mode.

4. Inspect all servo and control surface linkages and check for any binding or excess slop. Let the Hitec Jam Checker help you detect friction and binding of linkage rods.

5. Both the transmitter and receiver antennas must be fully extended when in use. DO NOT CUT OFF EXCESS RECEIVER WIRE OR BUNDLE IT.

6. Protect the receiver from excessive vibration by wrapping it in the sponge rubber Flight Preserver.

## E. CONTROL STICK LENGTH AND TENSION ADJUSTMENT

1. The length of both control sticks can be quickly adjusted. The head of the control stick is composed of two parts as shown in the drawing. First, unscrew the top part of the head until the desired length is reached. Then twist the bottom part until the top part is locked in place.

Set to the desired length by turning the knob, then lock

2. The unique open style stick assembly provides fully adjustable stick tension "feel". To adjust the stick tension, open the back of the transmitter and locate the tension adjustment screw as shown in the drawing. To increase tension, turn the screw clockwise. To decrease tension, turn the screw counter clockwise.
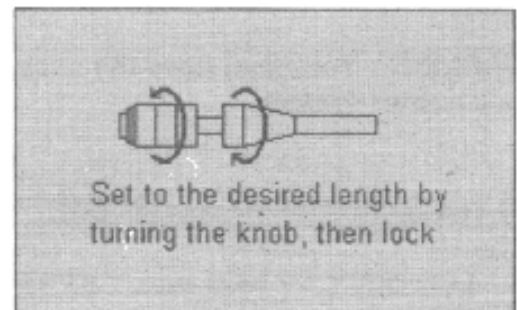
F. Throttle Ratchet Change

Some pilots may find it necessary to change the stick mode from Mode I to Mode II or vice versa. This is accomplished by first changing the Stick Mode as explained in the Initial Mode menu. Next, you will need to change the throttle ratchet by opening the back of the transmitter case and physically moving the mechanism.

The following example shows a change from Mode II to I. Please note since the drawing shows the backside of the sticks, the throttle will be found on the right side of the picture which we now want to move to the left.
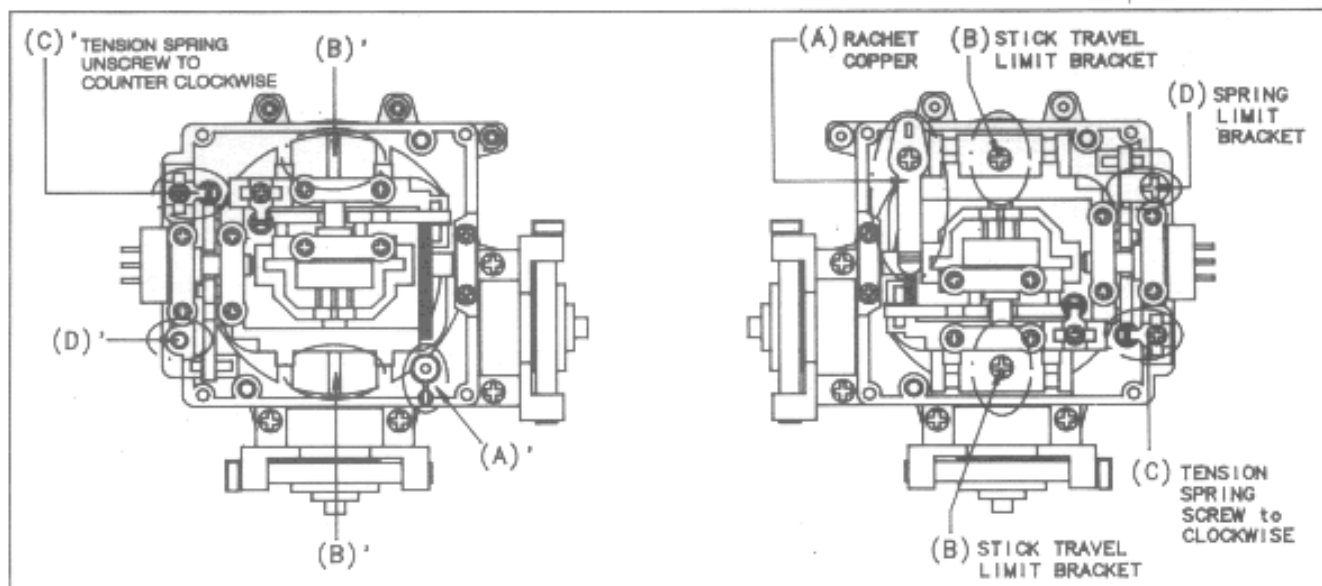
G. Trainer System

As with all other trainer systems, pulling down the trainer switch will enable the student transmitter to control the aircraft. Releasing it will return control to the instructor. Always use the Hitec #8310 one-way trainer cord to connect the two radios. When properly connected, the student transmitter cannot be activated (even if it is turned on) until the trainer switch is engaged by the instructor. This is a unique feature not found on other systems.

WARNING : You must have the snap roll option disabled prior to setting up the Prism 7X as a trainer system.

MAIN SYSTEM FUNCTIONS

A. LCD DISPLAY AND INPUT KEYS

The Prism 7X features an LCD type display to indicate system information and allow changes to the system. When power is turned "ON", the first display shown will be the normal operating display. The display will indicate the model number selected, PCM or PPM mode, and battery voltage. The Low Battery alarm (voltage reading flashing along with an audible alarm) will be displayed when the transmitter voltage drops to 9.2 volts or below. If you should hear this alarm while flying, **land immediately!**

Normal Operating Display

- Cursor
- Selected model
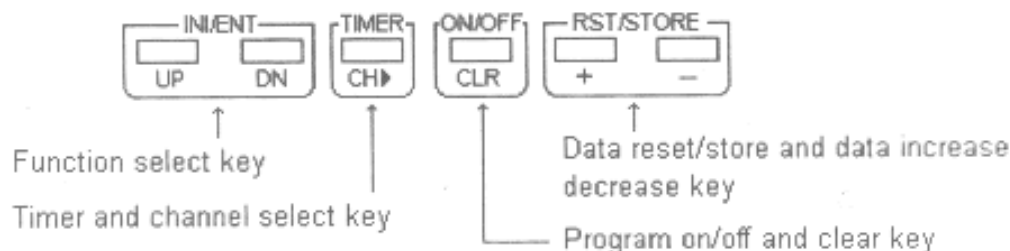- Transmitter battery voltage
- Selected modulation mode
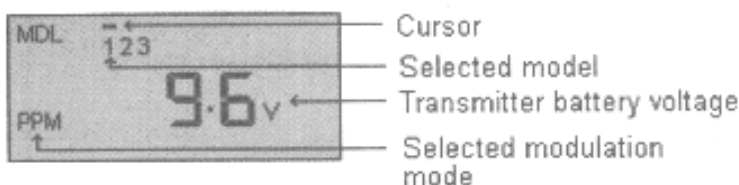
To access the software menu of the Prism 7X, study the diagram below showing the input keys of the Prism. The following programs can be accessed from the Initial Mode setting of the software:

Input keys

Function select key

Timer and channel select key

Data reset/store and data increase decrease key

Program on/off and clear key

- Model Select
- Timer Setting
- Mixing Function Selection
- Frequency Shift Mode Change

- Memory Copy
- Modulation Mode
- Stick Mode Change
- Data Reset

These functions are considered the Initial Mode functions and can be accessed by depressing both the "INI/ENT" keys down while turning the main power switch "ON". There is no other way to access the Initial Mode and prevents accidental changes to the modes. To select a function from the Initial Mode, you may use the "UP" or "DOWN" keys to run through the menu. Once we get into the actual programming, you will find that the use of these keys is quite easy. To save any of the settings made in any mode, simply turn the main power switch "OFF". Turning on the main power switch without depressing any of the keys returns the transmitter to normal operation.

At this time, you should study the Initial Mode Flow Chart to understand how the menu selection works within the software. Don't be shy, we are going to guide you all the way to a perfect aircraft set up.

INITIAL MODE SOFTWARE CHANGES

A. MODEL SELECTION (SEL)

The Prism 7X allows you to store the settings for up to three separate aircraft into memory. To select a model from the menu, access the Initial Mode, as noted above, and use the "UP" or "DOWN" key until the display shows the SEL function. To select a model, use the "TIMER/CH" key to move the cursor to the correct model desired. Turn the transmitter "OFF" and when the power is turned on once again, the model you selected will be displayed.
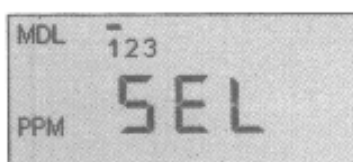
a. Press both UP and DN keys own while turning main power switch "ON"

b. Use either UP or DN key until the display shows the model select menu.

c. Use CH key to move the cursor to the model desired.

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INITIAL MODE FLOW CHART

* PRESS [UP] [DN] KEY SIMULTANEOUS AND POWER SWITCH "ON"

* POWER SWITCH "OFF" TO SAVE MEMORY

MDL 1 2 3 SEL PPM	[CH] (MODEL SELECT)	MDL 1 2 3 SEL PPM	[CH]	MDL 1 2 3 SEL PPM

MASTER / SLAVE

RST/STORE (+) (−)

MDL 1 2 3 CPY PPM	[CH] (MEMORY COPY)	MDL 1 2 3 CPY PPM	[CH]	MDL 1 2 3 CPY PPM

MODEL COPY

MDL 1 2 3 10:0 D PPM	[CH] (TIMMER SETTING)	MDL 1 2 3 10:0 U PPM

(+) (−) : DATA VALUE
[CLR] : DEFAULT
[CH] : UP OR DOWN TIMMER SET

MDL 1 2 3 9.6 v PPM	[CH] (PCM/PPM SELECT)	MDL 1 2 3 9.6 v PPM

MDL 1 2 3 UtL PPM

[UP] [DN]

MDL 1 2 3 OFF PPM	[CLR] MIXING SELECT (V-TAIL ELEVON AIL DIFF FLAPERON)

MDL 1 2 3 ELE PPM

(+) (−)

St1	[CLR] STICK MODE	St2

MDL 1 2 3 d1F PPM

MDL 1 2 SFt PPM	[CH]	MDL 1 2 SFL PPM

MDL 1 2 3 FLP PPM

MDL 1 2 3 RST 9.6 v PPM

PRESS [+] [−] KEY SIMULTANEOUS

INITIAL MODE : MIXING OFF
TIMMER SETTING
DEFULT
EDIT MODE : ALL DATA CLEAR

B. MEMORY COPY (CPY)

The Memory Copy function of the Prism allows you to copy the model set up information of one model number to another model number. This is useful if you wish to retain the set up to fall back on if you want to experiment on the set up for enhanced flight capabilities. In this example, we will show you how to store the set up from Model 1 to Model 3.

From the Initial Mode menu, use the "UP" or "DN" key until the display shows the CPY function. In this mode, note that there are two cursors displayed by the Model numbers. The cursor above the Model number is the master model being copied and the cursor below the Model number is the receiving Model number. First, set the master model by accessing the Model Select menu and then access the CPY menu here. To select the receiving Model number, use the "TIMER/CH" key to select the model number receiving the information. To effect the copy, simply turn the radio system "OFF". When power is turned off, the information is stored as desired and no other inputs are required. If no information copy is to be made, move the lower cursor to the same position as upper cursor position.
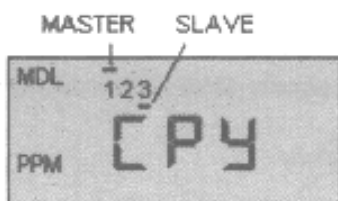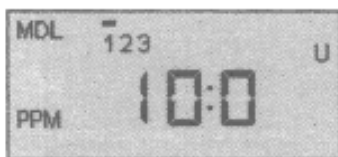

a. Press both UP and DN keys while turning main power switch "ON"

b. Use either UP or DN key until the display shows the Copy menu.

c. Use CH key to move the **slave** cursor to the receiving the information from the **master** model.

d. Depress both + and - keys to copy the data.

C. TIMER OPERATION

The Prism 7X has a built in timer capable of counting upward or downward and can be set for any time period desired by the pilot up to 30 minutes. To access the Timer menu, use the "UP" or "DOWN" keys from the Initial Mode menu until the display shows a steady time screen. If no setting has ever been made, the factory default of 10:0 is shown.

To change the length of time for the timer operation, use the "+" or "-" keys to change the time. To select the counting down or counting up function, use the "TIMER/CH" key until the correct mode (D or U) is found. To save the timer setting, simply turn the radio system "OFF". When the radio system is turn back on, you may begin the timer function by pressing the "TIMER" key. The timer will display elapsed time in increments of every ten seconds. When the time has elapsed, an audible alarm will sound for final ten seconds and the display will return to the normal mode. You may stop the timer clock at any time during the counting mode by pressing on the "TIMER" key. The timer will automatically return to the preset time you have programmed.

• **Timer Setting**

a. Press both UP and DN keys while turning main power switch "ON"

b. Use either UP or DN key until the display shows the Timer function.

c. Use + and - keys to input time value.

d. Use CH key to select either the counting down or up function.

Press CH key to start or stop timer

10
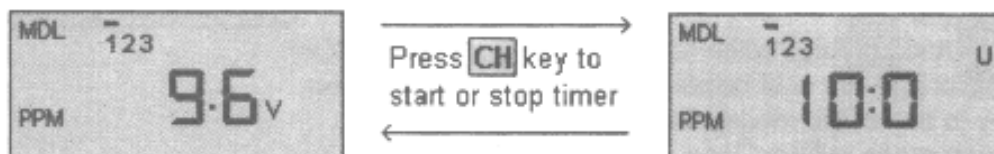
• **Timer Operation**
a. Press **CH** key to begin the Timer during radio system operating.
b. Press **CH** key to stop Timer.

D. MODULATION MODE SELECTION (PCM or PPM Select)

The Prism 7X is capable of operating using either PCM (Pulse Code Modulation) or PPM (Pulsed Proportional Modulation) type transmission. PCM receivers are available from Hitec through your local hobby dealer. To select the mode of transmission, access the Modulation Mode menu from the Initial Mode. This screen will show a flashing PCM or PPM indicator in the lower left corner of the LCD display. To select a transmission mode, use the "TIMER/CH" key. The mode desired will begin flashing upon selection. To retain this setting, simply turn the radio system "OFF". Upon turning the power "ON" once again, the correct mode of transmission will be in operation.
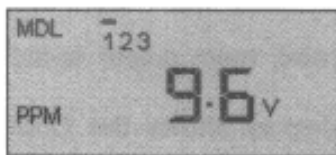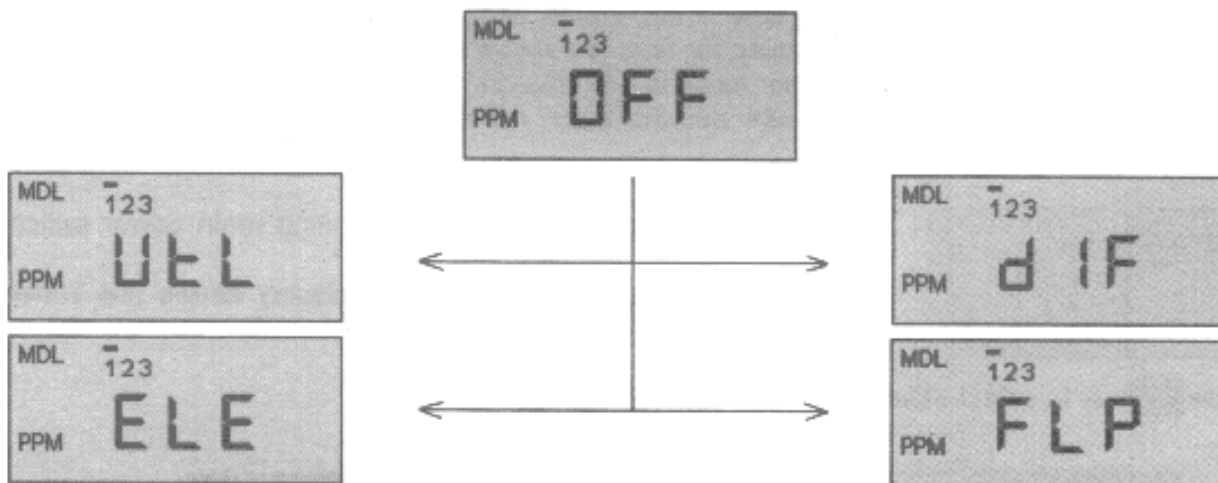
a. Press both **UP** and **DN** keys while turning main power switch "ON"
b. Use either **UP** or **DN** key until display shows Modulation Mode Selection menu.
c. Select either PCM or PPM mode by **CH** key.

CAUTION: You may not use a PCM type receiver with PPM transmission or vice-versa. They are incompatible and will not work.

E. MIXING FUNCTIONS MENU AND SELECTION

From here, you may set up the various mixing options for your aircraft. These options include: V-Tail mixing, Elevon mixing, Differential Mixing, and Flaperon Mixing. Follow along with us and you'll see how easy this operation is.

From the Initial Mode menu, select the Mixing Mode by using the "UP" or "DOWN" keys. If no mixing modes have been selected, the display will show "OFF" when the Mixing Mode is selected. Now, to access any mixing function from here, depress the "ON/OFF" key once and you can select a mixing mode by using the "+" or " -" key.
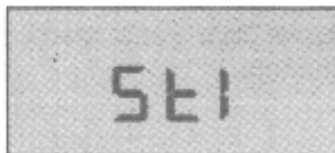
a. Press both **UP** and **DN** keys while turning main power switch "ON"
b. Use either **UP** or **DN** key until display shows the Mixing function.
c. Use **CLR** key to select the mixing function "ON/OFF".
d. Select a mixing mode by **+** or **-** key.

1. For V-Tail Mixing, the display will show UtL. This will mix channels 2 and 4 (elevator and rudder) together to act as one for elevator and rudder in a V-tailed model.

2. For Elevon mixing, the display will show ELE. This allows channels 1 and 2 (ailerons and elevator) to mix for delta winged or flying wing type aircraft.

3. For using two servos from two channels in the aileron function instead of using a "Y" harness, the Differential mix mode can be used. The display will show DIF in this mode. It will allow mixing of channels 1 and 7 (aileron and Aux 2) to function as the ailerons. The servo reversing function for channel 7 is used to reverse the channel 7 if needed. In this mode, the Aux. 2 switch will be non-functional. However, dual rates for rudder (channel 4) will still be operational.

4. To effect Flaperon mixing, the display will show FLP. This mixes channels 1 and 6 (aileron and Aux 1) together for aircraft that utilize the ailerons for flaps as well. In the standard aileron operation, channel 6 will work hand-in-hand with the ailerons. By utilizing the Aux 6 dial, flaps can be used while still maintaining full use of the ailerons in normal operation.

F. STICK MODE CHANGE (ST 1/2)

The Prism 7X allows you to change the control stick from mode I (elevator on the left and throttle on the right) to mode II (elevator on right and throttle on left) or vice versa.

To change stick, first change the program and then the ratchet of the throttle stick. To change the program, from the Initial Mode menu, use the "UP" or "DOWN" key until the display shows the St. 1 or St. 2 menu. Press the "ON/OFF" key to select the stick mode desired. To change the throttle ratchet, please refer to diagram on page 7.
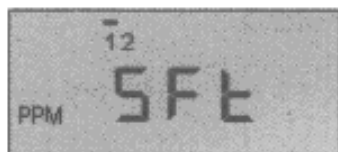

a. Press both [UP] and [DN] keys while turning main power switch "ON"

b. Use either [UP] or [DN] key until display shows the Stick Mode Change menu.

c. Press [CLR] key to select the desired stick mode.

d. Change the position of the throttle ratchet.

G. FREQUENCY SHIFT MODE CHANGES (SFt)

NOTE : This function only applies to 72Mhz (USA) only. All other countries should leave it at shift Mode I.

The Prism 7X has been programmed to transmit in both the negative shift (Futaba and Hitec) and the positive shift (Airtronics and JR) in the PPM (FM) mode. This will allow modelers who have multiple planes set up with different manufacturer's equipment to operate any one of them from one transmitter regardless of which company manufactured the receiver. To change the frequency shift mode, access the Initial Mode menu and use the "up" or "down" key until the display shows the SFt menu. Above that will be a 1 2 with a cursor blinking over one of the numbers. Press the TIMER/CH key to select the desired shift mode. Shift mode 1 (negative shift) works with Hitec and Futaba FM receivers. Shift mode 2 (positive shift) will work with JR and Airtronics FM receivers.
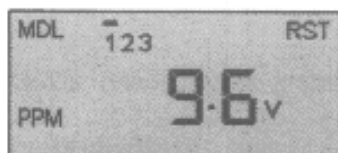
PRISM 7 X

a. Press both `UP` and `DN` keys while turning main power switch "ON"
b. Use either `UP` or `DN` key until display shows the Frequency Shift Mode Change menu.
c. Use `CH` key to select mode 1 or mode 2.

CAUTION: When making shift mode changes, always verify that the receiver channel matches the transmitter channel. Also, verify that servo channel assignments on the receiver match the Prism 7X transmitter. For example: Channel 1 for JR is the throttle channel. For Hitec, the throttle channel is number 3. Since the transmitter dictates channel assignment to the receiver, verify servo movement with proper stick movement prior to first flight for all channels.

H. DATA RESET (RST)

This is the final mode available under the Initial Mode menu. The Data Reset mode allows the pilot to clear all settings for a particular model from the memory. The settings will revert to the factory defaults with no mixers in force. To perform a reset function, use the "UP" or "DOWN" keys to select the Data Reset mode, which is signified by the letters RST flashing in the upper right corner of the LCD display. Reset all data by depressing both the "+" and "-" keys on the transmitter. The radio will beep twice when this function is initiated. All data (except PCM/PPM mode and Stick mode) is now cleared from memory for that particular model only. This includes all servo settings performed in the Main Edit mode.

a. Press both `UP` and `DN` keys while turning main power switch "ON"
b. Use either `UP` or `DN` key until display shows Data Reset menu.
c. Press both `+` and `-` key to reset all the memory.

CAUTION: It is advisable to copy model settings to another model memory to avoid losing valuable data prior to initiating the reset function.
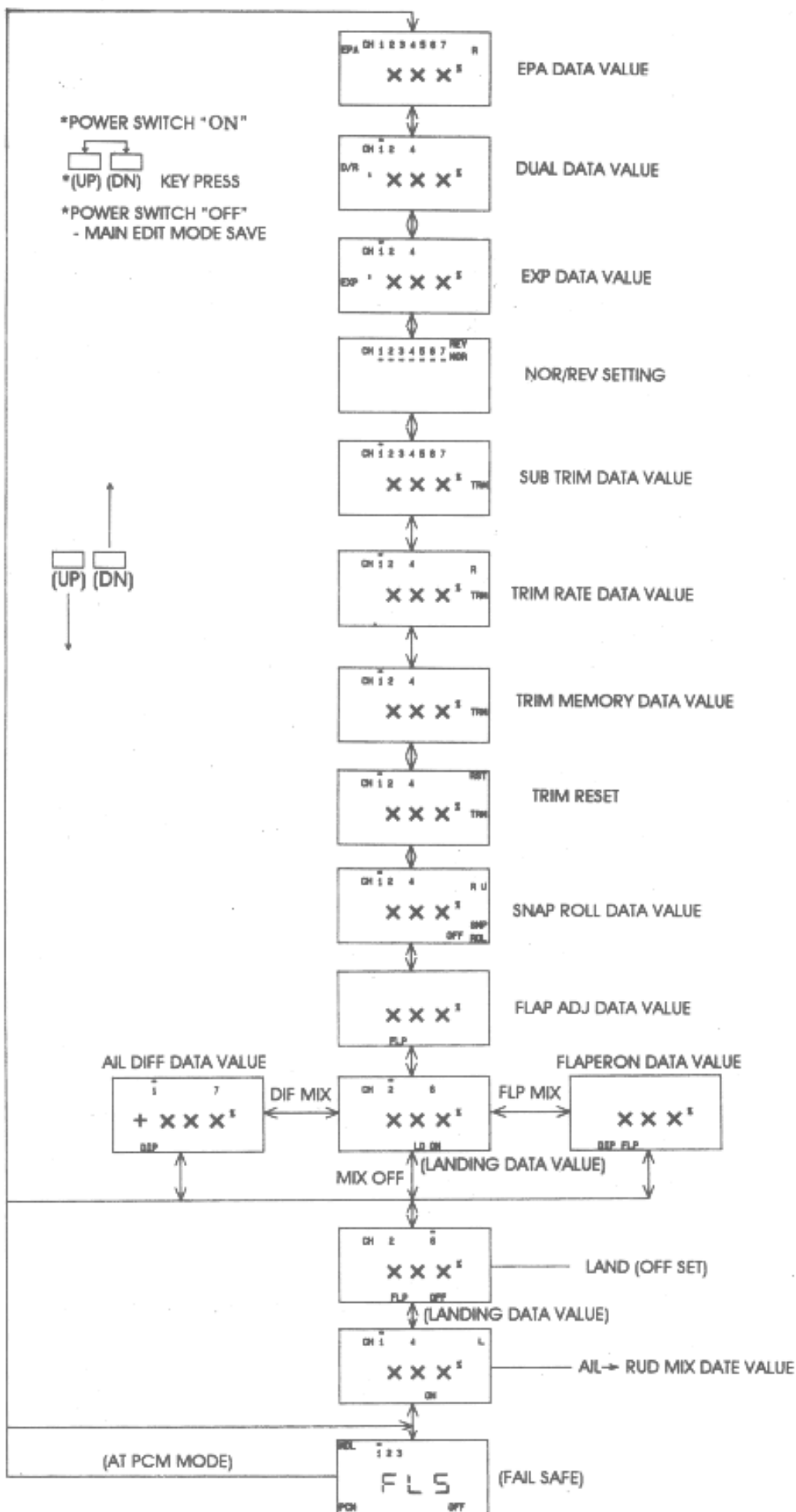
MAIN EDIT MODE SOFTWARE CHANGES

In this mode, the pilot can perform all of the normal servo adjustments required when setting up his aircraft. This includes setting the end points, dual rates, servo reverse, etc. Again, this is an easy operation to perform and, by following along with us, you can learn how to quickly install a radio system and set it up for any particular model you desire. Study the Main Edit flow chart a minute and you can see how the menu selection works.

To access the Main Edit mode, leave the radio in the "ON" position and then depress both the "UP" and "DOWN" keys at one time. This will bring you into the Main Edit mode of the system and it will display all functions in order. To scroll through to any particular function, use the "UP" or "DOWN" keys to make a selection. Now, let's set up an aircraft.
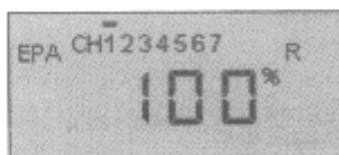
A. END POINT ADJUSTMENT (EPA)

The End Point Adjustment function allows you to fix the throw of the servo to the desired distance. This allows you to forget adjusting the push rod position on the control horns for proper throw. Adjustment of any channel can be effected from zero movement to 125% of the normal movement. (Normal movement is considered to be 90 degrees).

MAIN EDIT MODE

*POWER SWITCH "ON"

*(UP) (DN)　KEY PRESS

*POWER SWITCH "OFF"
  - MAIN EDIT MODE SAVE

(UP) (DN)

Display	Label
EPA CH 1 2 3 4 5 6 7　R　XXX^S	EPA DATA VALUE
CH 1 2　4　D/R　XXX^S	DUAL DATA VALUE
CH 1 2　4　EXP　XXX^S	EXP DATA VALUE
CH 1 2 3 4 5 6 7　REV NOR	NOR/REV SETTING
CH 1 2 3 4 5 6 7　XXX^S TRM	SUB TRIM DATA VALUE
CH 1 2　4　R　XXX^S TRM	TRIM RATE DATA VALUE
CH 1 2　4　XXX^S TRM	TRIM MEMORY DATA VALUE
CH 1 2　4　RST　XXX^S TRM	TRIM RESET
CH 1 2　4　R U　XXX^S SNP ROL OFF	SNAP ROLL DATA VALUE
XXX^S FLP	FLAP ADJ DATA VALUE

AIL DIFF DATA VALUE　　　　　　　　　　　　　FLAPERON DATA VALUE

+ XXX^S DEP　　—DIF MIX—　CH 2　8　XXX^S LD ON　—FLP MIX—　XXX^S DEP FLP

MIX OFF　　　(LANDING DATA VALUE)

CH 2　8　XXX^S FLP OFF　————— LAND (OFF SET)

(LANDING DATA VALUE)

CH 1　4　L　XXX^S ON　————— AIL→ RUD MIX DATE VALUE

(AT PCM MODE)　　　MDL 1 2 3　F L S　PCM　OFF　(FAIL SAFE)

14

To make the endpoint adjustments, select the channel desired using the "TIMER/CH" key. A cursor will appear above the selected channel. The main display will also show the amount of throw currently allowed in percentages. Use the "+" and "-" keys to change the end points. Each direction can be adjusted separately by using the control stick or knob that corresponds to the channel. For example, to adjust the aileron end point, select channel 1. Hold the aileron stick to the right and begin making the adjustments as needed with the "+" or "-" keys. Now, move the stick to the left, and make any adjustments desired again. Repeat this step for the elevator function, only use the elevator stick to determine which direction of end point travel is adjusted. The LCD display will also assist you by telling you which direction is being affected. Small letters, "R", "L", "U", "D", will be displayed on the right of the LCD display. Channel 5 will show a "+" or "-" sign on the left of the percentage number, as will channel 6 and 7. To save the setting, return to the normal mode of operation.

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows End Point Adjustment menu.
c. Select desired channel by CH key.
d. Adjust end point travel by + or - key while selecting direction of servo by control stick, knob or gear switch.
e. Use CLR key to reset data of each channel

B. DUAL RATE (D/R)

The Prism 7X features three dual rate switches as shown in the system layout on page 4. These switches are assigned to the three primary channels, Aileron, Elevator and Rudder. Access to this portion of the menu is done through the Main Edit Menu. Use the "UP" or "DOWN" key to arrive at the D/R menu. This function will show the available channels along the top of the LCD display, with a cursor shown over the channel being set up. Leave each dual rate switch in the upper position and select the channel. If no dual rate is selected, the value displayed will be 100%. For a decrease in throw rate when the dual rate switch is activated, use the "+" or "-" keys to change the percentage setting. You may have the receiver and servos "ON" at this time to set the servo throw desired. Once you have determined the setting, you may now select the next channel for adjustment. Flip each dual rate switch back and forth to observe the change in rate throws.
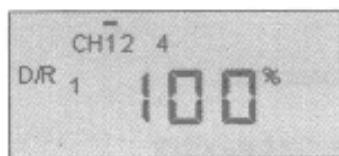
a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Dual Rate menu.
c. Leave dual rate switch in the desired position either 1 or 2.
d. Select desired channel by CH key.
e. Adjust servo throw by + or - key.

WARNING : The channel 4 dual rate switch is shared with the channel 7 auxiliary switch. If you plan to use channel 7 for anything but differential ailerons, do not program dual rates fates for rudder (Ch. 4)

NOTE : The dual rate switches have no "ON" or "OFF" position, as the pilot is free to choose this. In either case, you may leave the "OFF" position as desired and then set the dual rates in the other switch position. The LCD display will assist here in that it shows which direction the switch lies while in this mode. Also, you may exceed the normal throw movement of 125% in this mode, as well as programming zero movement. Please use care with this program.
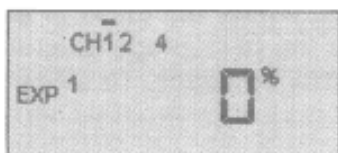
C. EXPONENTIAL RATES (EXP)

Exponential rate throws are available to the primary flight surface channels, Aileron, Elevator and Rudder. It is also switchable using the Dual Rate switches to activate the option. With this option, it is possible to have the same throws or dual rate throws, with or without exponential in either mode.

Exponential rate throws means that the servo movement moves with a variable ratio of movement of the control stick. Normally, the servo will move in an exact, or linear, motion with the control stick. In exponential movement, the servo can move very slowly around neutral and then speed up the movement as the stick deflection increases. This allows a very sensitive aircraft to be tame around neutral, where fine control is desired, yet still be capable of wild maneuvering when the sticks are deflected hard over.

To access the Exponential menu, use the "UP" or "DOWN" keys to find the EXP screen. If no rates have been set in this mode, then 0% will be displayed. A cursor will lie above the affected channel for adjustment and can be moved using the "TIMER/CH" key. Use the "+" or "-" keys to change the exponential rate setting and you can also use the dual rate switch to determine if exponential rates are effective at high rate, low rate, or both. The closer the value displayed on the screen is to zero percentage, the more linear the servo will be to your command. As the percentage rate increases, the more nonlinear the movement of the servo will be to the stick movement. You can leave the receiver and servos "ON" to observe the effect of the exponential settings.

Note that you may set the exponential rate for more movement at center by using percentages above zero, up to 100%. For less movement at center, such as in a sensitive model, use percentages below zero, down to -100%. Also, all channels set for exponential will activate with the use of the D/R switch when set up.

CH12 4
EXP 1   0 %

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Exponential menu.
c. Select dual EXP position by dual rate switch.
e. Adjust exponential rate by + or - key.

D. SERVO REVERSING (REV)

All of the channels within the Prism 7X can be reversed at will from the transmitter. Again, this allows rapid aircraft set up. To access the Servo Reversing menu, use the "UP" or "DOWN" keys from the Main Edit Menu. The LCD display will show all channels with a flashing cursor on the channel selected for reversing. To reverse a servo, use the "+" or "-" key to move the cursor to the proper direction. The receiver and servos can be left "ON" during this operation to show the direction being selected.
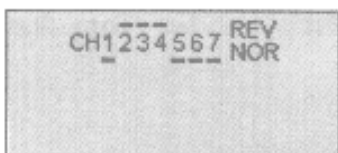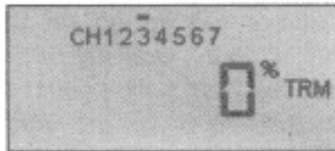
CH1234567 REV
               NOR

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Servo Reverse menu.
c. Select desired channel by CH key.
e. Use + or - key to determine servo direction.

E. SUB TRIM FUNCTION (TRM)

The Sub Trim function is an option that allows you to set the neutral position of a flight surface without using the normal trim switches or adjusting the push rods. In operation, adjusting the sub trim will slew the servo as desired without affecting the normal trim switch or total throw of the servo. To access this function, use the "UP" or "DOWN" keys from the Main Edit menu.

The display screen will show all channels available and the TRM indicator will be flashing. You may now adjust the neutral position of any servo by first selecting the desired channel using the "TIMER/CH" key. The flashing cursor will indicate which channel you have selected. Now, use the "+" or "-" keys to adjust the neutral position of the channel. Once the position has been found, you may exit the screen back to the normal operation mode or any other option screen.

Note that you can overthrow the travel limits of a servo with this option. Use this option carefully as excessive movement away from the center point of a servo could cause the servo to travel beyond the design limits of the servo and damage it. When setting up a new model, it is wise to have the control surfaces as close as possible to a neutral setting and the sub trim set at zero. This allows maximum flexibility of this option.
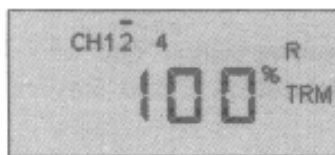
CH1234567 ⬜%TRM

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Sub Trim menu.
c. Select desired channel by CH key.
e. Adjust neutral position by + or - key.

F. TRIM RATE ADJUSTMENT (TRM R)

With the Trim Rate Adjustment option, you can determine how much trim authority is allowed by the mechanical trimmer switches on the transmitter. You may use any amount of rate adjustment from zero movement to 125% travel movement. This option applies only to channels 1, 2, and 4 (aileron, elevator and rudder).
To access the Trim Rate Adjustment option, use the "UP" or "DOWN" keys from the Main Edit menu until you reach this option screen. Here, you will find only channels 1,2, and 4 represented on the screen and the TRM indicator will be a steady display with an "R" flashing above it. Use the "TIMER/CH" key to select the channel desired. The cursor will move to the selected channel. Now, you may use the "+" and "-" keys to change the percentage rates for trim. The system also has built in default settings of zero, 30% and 100% trim rates. To utilize a factory setting, use the "ON/OFF" key to choose a default setting.

Note that you can actually set up an aircraft that has no trimmer adjustment, preventing someone from bumping the trimmer switch out of position. To do this, you need to fly the aircraft to establish the position of the flight surfaces. Note the exact position of the surfaces and then use the Sub Trim function to fix the surface in position. Now, set the Trim Rate Adjustment function to zero for that channel. The trimmer switches can now be moved anywhere without effect on the servo. This is a desirable situation for a well trimmed aircraft. However, you must remember that you can no longer make in-flight adjustments in this mode.

CH12 4 R 100%TRM

a. Press both UP and DN keys with main power switch "ON"
c. Use either UP or DN key until display shows Trim Rate Adjustment menu.
d. Select desired channel by CH key.
e. Adjust trim rate by + or - key.
**f.** Use CLR key to activate a factory setting of 0%, 30% and 100% trim rates.

G. TRIM MEMORY FUNCTION (TRM)

The Trim Memory option allows you maintain the position of any trim switch at center, despite the real trim position being somewhere else. This is especially handy when models of different trim settings are used and remembering where the trim switch should be is not possible. To access this option, use the "UP" or "DOWN" keys from the Main Edit menu until this option is

selected. The LCD display will show the channels affected, No. 1, 2, and 4, and the small "CH" will flash to the left of the channel numbers.

To use this option, it will require you to have flown the model to establish the setting of the trim switches. Leave the trim switch in place, and then press both the "+" and "-" keys at the same time. Now, move the trimmer switch for that channel to the center position on the transmitter. That's it, the trimmer switch position is now centered and becomes the neutral point for that switch. There is an audible signal made by the transmitter when the neutral point on the mechanical trimmer is found.

Try not to use this option when the trimmer switch affected is at the extreme end of the trim position. You may end up going beyond the mechanical limits of the servo during normal operation and damage the servo. Make an adjustment from the control linkage first. Used correctly, this feature will allow all models in memory to share the exact same trim setting on the trimmer switches, making your life much easier.
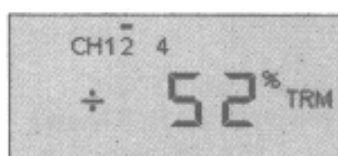
<table>
<tr>
<td>

CH12 4

÷ 52 %TRM

</td>
<td>

a. Pre-Determine neutral position of trim lever by test flying.
b. Press both UP and DN keys with main power switch "ON"
c. Use either UP or DN key until display shows Trim Memory menu.
d. Select desired channel by CH key.

</td>
</tr>
</table>

e. Press both + or - key to memorize the neutral point of trim.
f. Move trim lever to the center position.

H. TRIM MEMORY RESET FUNCTION (RST/TRM)

This function will allow you to reset the Trim Memory back to zero if changes are necessary to the Trim Memory. Do not attempt to re-establish the trim memory position without first resetting the Trim Memory to zero under this function. You'll only make things worse.

To access this function, use the "UP" or "DOWN" keys from the Main Edit menu until this option screens appears. The display screen will show the channels affected (No. 1, 2, and 4) and the letters "RST" will flash on the upper right of the screen. Use the "TIMER/CH" key to select the channel to reset. To reset the channel, depress both the "+" and "-" keys at the same time. An audible signal from the transmitter will confirm the reset function has been used.
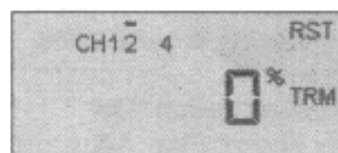
<table>
<tr>
<td>

CH12 4   RST

0 %TRM

</td>
<td>

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Trim Memory Reset menu.
c. Select desired channel by CH key.
g. Press both + or - keys to reset the trim memory.

</td>
</tr>
</table>

I. SNAP ROLL SWITCH (SNP ROL)

The Snap Roll function is a program function affecting the primary three flight control channels to perform a snap roll while airborne. The use of the Snap Roll switch will override the sticks, so use caution. The direction and attitude of the snap roll can be set from this menu and the command for this switch is effective for as long as the Snap Roll switch is held down.

To access this option, use the "UP" or "DOWN" keys to locate the proper screen. The display will show the channels affected along with the "SNP ROL" sign in the lower right corner of the screen. To activate the Snap Roll switch, use the "TIMER/CH" key to scroll over to the flashing OFF or ON indicator in the display. To toggle between ON and OFF, use the "ON/OFF" key to

activate or turn off the option. To select the direction of the snap roll, use the "+" or "-" keys to scroll through the flashing letters. RU is Right and Upward, RD is Right and Downward, LU is Left and Upward and LD is Left and Downward.

You must now select the amount of surface throw each flight surface will receive when the option is activated using the Snap Roll switch. Use the "TIMER/CH" key to select the channel and then use the "+" or "-" keys to program in the amount of throw each surface will move when activated. Zero percentage means that the surface will not be affected by the snap roll switch, while 100 % will provide full throw to the surface. The percentage rates will provide up to 125% of the programmed throw on a servo.

This is a complicated maneuver, if you have little experience in performing this maneuver, it may help to enlist the assistance of an experienced pilot for setting up this option. Also note that the direction of the snap roll on the menu screen assumes that all servos are moving in direction as set from the factory, and not reversed. It will help to leave the receiver and servos "ON" to confirm the direction of the snap roll during the set up of this function.
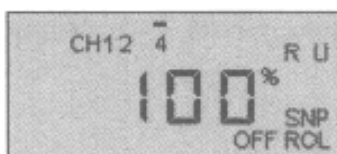
CH12 4   R U
100 %
SNP
OFF ROL

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Snap Roll menu.
c. Press CH key three times to scroll over to ON/OFF selecting.
d. Use CLR key to activate Snap Roll function ON.
e. Determine Snap Roll direction by + or - key.
f. Select desired channel by CH key.
g. Adjust servo throw by + or - key.

J. FLAP ADJUSTMENT (FLP)

This option allows the pilot to set the amount of movement available under channel 6, for flaps. It is controlled by the Aux. 1 channel knob on the upper left face of transmitter.
With this function, you can utilize the factory default settings of zero (no flap movement), 30% or 100%. You may also program in your own percentage settings.

To access this option, use the "UP" or "DOWN" keys under the Main Edit menu until the screen is selected. This screen will simply show the percentage currently being used and the FLP sign at the bottom of the screen. Use the "ON/OFF" key to select one of the factory default settings or, you may use the "+" or "-" keys to set your own percentages. During this operation, you may leave the receiver and servos "ON" to confirm the amount of movement being programmed.

30 %
FLP

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Flap Adjustment menu.
c. Adjust flap amount by + or - key.
d. Use CLR key to activate a factory setting of 0%, 30% and 100% flap amount.

### K. FLAP-ELEVATOR MIXING (LANDING MODE) (LD ON/OFF)

The Flap Landing Mix option allows the pilot to compensate for any pitching tendency the plane may have when the flaps are lowered. It mixes in the Channel 6 Flap function to the Channel 2 Elevator function. This is especially useful when using flaps as an air brake for landing and the elevator must compensate for the increased pitching movement when the flaps are lowered. The pilot can concentrate more on the landing rather than trying to hold the nose in position.

This option is effective regardless of whether the airplane being set up has separate flaps or if it has the flaperon mixing mode engaged.

To access this option, use the "UP" or "DOWN" keys in the Main Edit menu to locate the option screen. The option screen will show the channel 2 and 6, plus the letters "LD" will appear at the bottom center of the display screen. By flipping the Landing toggle switch on the face of the transmitter, you can see the option being activated when the toggle switch is pulled down. The option must be turned on before inputting data.

To set up this option, you will have to know approximately how much flap deflection will be used and how much elevator compensation is required. Note that when this option is used, both elevator and flaps will move to the point you program in here. This option works independently of the normal flap controller knob. Select the channel you wish to program using the "TIMER/CH" key. Use the "+" and "-" keys to set the amount of movement desired by both the elevator and flaps in this mode. Note that the option allows movement in either direction from center up to 125% of normal servo travel. Caution should be exercised here in that you can cause the servo to travel past its mechanical limits and damage the servo. Once the percentages have been set up, you may activate this option at any time using the LANDING switch on the transmitter.

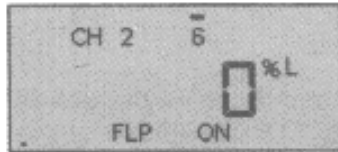To disable this option, simply set both percentages to zero.
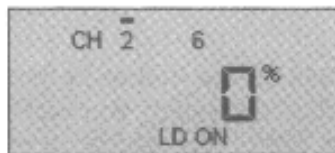
CH 2 6

□%

LD ON

a. Press both UP and DN keys with main power switch "ON"
b. Use either UP or DN key until display shows Flap-Elevator mixing.
c. Activate the mixing by landing toggle switch "ON".
d. Select desired channel by CH key.
e. Use + or - key to set the amount of Flap and Elevator mixing.

L. ELEVATOR-FLAP MIXING (FLP ON/OFF)

Elevator to flap mixing allows the pilot to mix "down" flaps with "up" elevator. The effect of this is a quicker pitch rate for tighter loops. This has proven to be a very popular feature for those participating in Fun Fly contests. As in the Landing Mode, the Elevator to Flap mixing will operate in any airplane set up in the flaperon mode.

To access the Elevator to Flap mixing option, press the "UP" and "DOWN" keys with the radio already turned on. Press either the "UP" or "DN" key until the FLP ON/OFF screen appears. Place the landing/elevator-flap switch to the full up position. This will turn the option on and allow access to data input. To the right of the percentage figure you will notice the letter "U" for up elevator. You will also notice that Ch 2 and 6 both appear on the upper screen with a cursor above channel 6. Because you only need to program in the amount of flaps you need to achieve the turning radius you desire, only channel 6 accepts data input. Using the "+" or "-" keys, you can now determine the amount of flaps you want for full up elevator. If you push the stick forward, the percentage of flaps return to 0% and the letter "D" (for down elevator) will appear along side. You may program in flap mixing for down elevator if you so desire or leave it at 0%.

As with the Landing Mode, this option works independently from the flap controller knob.

a. Press both **UP** and **DN** keys with main power switch "ON"
b. Use either **UP** or **DN** key until display shows Flap Landing mixing.
c. Activate the mixing by landing toggle switch "ON".
d. Select desired channel by **CH** key.

**e.** Use **+** or **-** key to set the amount of Flap Landing mixing.

M. AILERON-RUDDER MIXING

Aileron to rudder mixing is commonly used to coordinate turns of large scale aircraft and sailplanes. Within this program, you may designate either of the two control channels (1 & 4) as the "master" with the other as the "slave". What this means is that if you designate the aileron channel (Ch 1) as the "master", then the rudder channel (Ch 4) will perform as the slave. Whenever the aileron stick is moved, the rudder will move to a preset position in conjunction with the ailerons in order to eliminate adverse yaw or to present a more scale like turn for larger aircraft. However, it must be remembered that the rudder stick can override the mixing input simply by moving it.

To begin programming the aileron-rudder mix, turn the radio on and press the "UP" and "DN" keys to access the Main Edit menu. Press the "UP" or "DN" key until you see a screen with Ch 1, 4 across the top and a percentage in the center with a small letter "L" to the right of it. At the bottom of the screen you will see either "ON" or "OFF". Pull the aileron rudder mix switch forward to activate this option. You cannot enter data until this is done.

A cursor should be above channel 4 indicating that the "slave" channel will be the rudder. If this is the correct set up, use the "+" or "-" keys to input the amount of rudder deflection you want when making a left turn. Now, move the aileron control stick to the right. The percentage returns to 0% and a small "R" appears to the right. Use the "+" or "-" keys again to input rudder mix for a right turn.

Check to make sure you have programmed the correct rudder movement to match up with the turn. It is possible to program the rudder to move opposite of the aileron turn with this program. If you wish to program the rudder as the master channel, move the cursor from channel 4 to channel 1 by pressing the Timer/CH key. As above, use the "+" or "-" keys to put in aileron response when you move the rudder control stick in both directions.
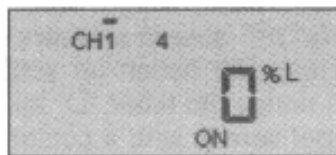
a. Press both **UP** and **DN** keys with main power switch "ON"
b. Use either **UP** or **DN** key until display shows Aileron Rudder mixing.
c. Activate the mixing by Aileron and Rudder mixing toggle switch "ON".

d. Select desired channel by **CH** key.
e. Use **+** or **-** key to set the amount of Aileron and Rudder mixing.

N. FLAPERON DIFFERENTIAL MIXING (DIF FLP)

This option allows the use of a flaperon set up for the ailerons and have differential movement. Differential movement of the ailerons allows a more axial roll to be performed and normally means that the aileron moving upwards has more motion than the opposite aileron moving downward. The flap feature of the flaperon set up remains intact and can be used with the Aux 1 control knob. Aerodynamically, the downward moving aileron causes more drag than rolling motion, which results in the rolling maneuver being less than axial.

To utilize this option, you must first access the Flaperon Mixing option in the Initial Mode menu. Again, this means that the aircraft will have separate ailerons servos, using channel 1 and 6. Once the Flaperon Mixing option has been activated in the Initial Mode Menu, return to the normal operation mode and access the Main Edit Menu. Select the DIF FLP screen within the Main Edit menu. This screen will display a flashing DIF prompt with a non-flashing FLP prompt. Use the "+" or "-" keys to program in the amount of differential movement desired in the ailerons. Note that you can only add differential movement, and not subtract. The proper amount of differential movement is dependent on the aircraft and the pilot, so you will have to experiment with this option to get the differential motion to your liking.
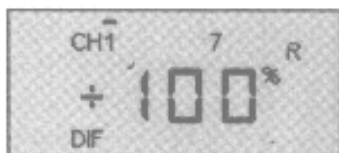

a. Select Differential Mixing in the Initial Mode menu.
b. Turn the power switch "OFF" and then back "ON"
c. Press both **UP** and **DN** keys to get to the Main Edit Mode menu.
d. Use either **UP** or **DN** key until display shows Flaperon Differential mixing.
e. Use either ⊞ or ⊟ key to set the amount of the differential movement.

O. AILERON DIFFERENTIAL (DIF)

In this option, you may utilize aileron differential without using the ailerons as flaps, as in the previous flaperon set up. In this case, the aircraft either has separate flaps, or no flaps are present and aileron differential is desired. The aileron function will use two separate servos, plugged into channel 1 and 7 for this option.

To access this option, you must access the Initial Mode menu and select the Mixing Options. If no mixing options are being used, the display will show "OFF". Use the "ON/OFF" key to activate the Mixing Options and then select the "DIF" screen using the "+" or "-" keys. Turn the radio "OFF" and then back on to normal operation. Access the Main Edit menu by depressing both the "UP" and "DOWN" keys at the same time and access the "DIF" screen using the "UP" or "DOWN" keys. This screen will show the channels affected (No. 1 and 7) plus "DIF" will appear in the lower left corner of the display.

You may now program in the amount of differential desired by using the "+" or "-" keys to change the percentages. Note that you may change the percentages from 100% down to zero only. You may leave the receiver and servos on at this time to confirm the movement desired in this option. By returning to the normal mode of operation, the option is saved and active.

a. Select Differential Mixing in the Initial Mode menu.
b. Turn the power switch "OFF" and then back "ON"
c. Press both **UP** and **DN** keys to get to the Main Edit Mode menu.
d. Use either **UP** or **DN** key until display shows Aileron Differential mixing.
e. Select desired channel by **CH** key
f. Use ⊞ or ⊟ key to set the amount of the aileron differential movement while selecting direction by aileron control stick.

P. FAIL SAFE (FLS)

The Fail Safe mode of operation is used when a PCM type receiver is in service and PCM mode is active within the Prism 7. The Fail Safe feature allows the radio receiver to move all servos to a predetermined position should a loss of signal occur while in operation. Normal operation will resume once the radio signal returns to the receiver.

PRISM 7 X

To use the Fail Safe option, you must access the Initial Mode menu by holding down both the "UP" and "DOWN" keys and turning the radio system ON. Use the "UP" or "DOWN" key to locate the Transmission Mode screen, which display a flashing PPM or PCM prompt on the left of the screen. Use the "TIMER/CH" key to select PCM mode. (Again note that Fail Safe is only possible with PCM operation). Once the PCM mode is selected, turn the system OFF and then back ON to return to normal operation.

Now, access the Main Edit Menu by depressing the "UP" and "DOWN" keys at the same time while in the normal operation mode. Using the "UP" or "DOWN" key, locate the Fail Safe screen, or "FLS". This screen will display the model numbers in which Fail Safe is available, the letters FLS, and a flashing prompt at the lower center of the screen. It will flash either OFF or ON. Use the "ON/OFF" key to toggle the Fail Safe mode.

Once you have activated the Fail Safe mode, turn the receiver system on with all servos plugged in. Place the control sticks of the transmitter into the position where you would like the servos to be when Fail Safe occurs. Now, depress both the "+" and "-" keys at the same time to lock in this position to the Fail Safe memory. The radio will issue an audible beep to confirm the setting. You may now return to the normal mode of operation for flying and the Fail Safe feature can now be utilized.

a. Pre-determine PCM mode in the Initial Mode menu.
b. Turn the power switch "OFF" and them back "ON"
c. Press both UP and DN keys to get to the Main Edit Mode menu.
d. Use either UP or DN key until display shows Fail Safe "ON".
e. Press CLS key to activate Fail Safe "ON".
f. Determine the Fail Safe Position by control sticks and/or trim levers.
g. Press both + or - key to memorize the Fail Safe position set by control sticks and/or trim levers.

Here are some recommendations on setting the Fail Safe position on the Prism 7X radio

For Sailplane or gliders : Aileron or Rudder at Neutral; Elevator slightly "UP"; Throttle (flap) "DOWN"

For Trainer or Sport Ships : Aileron or Rudder at Neutral; Elevator slightly "UP"; Throttle at idle

For fast Sport and Pattern Models : Aileron at Neutral; Elevator at Neutral; Throttle at idle; Retracts are "DOWN" (if used)

These are only recommendations and only the pilot can determine which setting properly suits the aircraft and flying style being used. To confirm the settings used in the Fail Safe mode, you may turn the transmitter OFF while leaving the receiver ON. The servos should travel to the Fail Safe positions and hold there until you turn the transmitter back ON once again.

This concludes the programming portion of the Prism 7X software options. As you can see, the Prism 7X is a very capable system, with many useful options. We ask that you now take the time to read over the general instructions for the care and use of the Prism 7X in order to get the most from your system.

GENERAL INSTRUCTIONS

Your Prism 7X system is a complete outfit, including batteries and charging system. The Prism 7X features rechargeable Nicad batteries for long life and consistent service. Please follow the next few paragraphs of instruction carefully for best performance results.

CHARGING The Prism 7X system comes with a wall type system charger. Separate LED lights allow the user to confirm that the charger and batteries are connected for charging.

Initial charging of your Prism 7X system should be for a period of at least 15 hours for both the receiver battery and the transmitter battery. After the initial charging period, you may use an overnight charge to bring the system to full capacity, ready for flight operations. Do not leave the charger connected to the transmitter or receiver any longer than recommended. Over charging of the system batteries could severely damage the batteries, resulting in system failure.

SYSTEM USE The Prism 7X radio is a solid state electronic device. As such, it can be damaged with abuse. Never drop or throw the system components, as this can severely damage them. There is no need to lubricate the servos in any way, although if you should damage a servo due to a crash or other accident, you should know that there is a lubricant applied to the servo gears. We recommend that damaged components are returned to the factory for proper service and care.
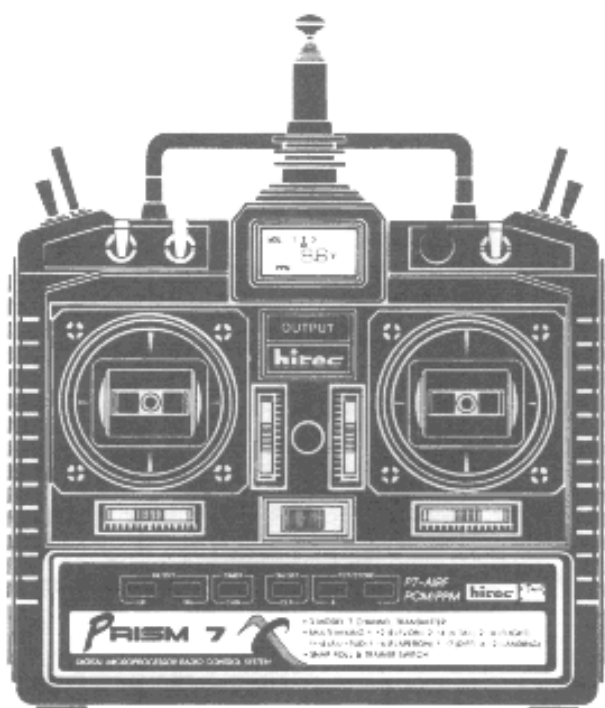
Because this system is prone to vibration and some electronic wear, we recommend that the system be checked and tuned at least once a year by an authorized Hitec Service Center. This will insure that your system operates with highest reliability and you will fly with confidence.

Do not expose the system components to direct sunlight or sources of heat for any period of time. Your Prism 7X system features and LCD type display, which may darken with long exposure to direct sunlight. Removal of the system into the shade will return the LCD display to normal in a short time.

Always operate this system in a safe and responsible manner. Never fly in areas where it is risky to operate or where other pilots may fly in close proximity to you without their knowledge. Never fly alone. This is risky, and it's always more fun to fly with a friend to share the experience.

Good luck and happy flying!

The R/Cer's Partner

PRISM 7

3 MODEL 7 CHANNEL
MULTI MIXING
SNAP ROLL & TRAINER SWITCH

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