

**COPY**



# **CALIBER 3P**

## **INSTRUCTION MANUAL**



**THANK YOU FOR SELECTING AIRTRONICS**

We appreciate your purchase of this new AIRTRONICS CALIBER RADIO CONTROL SYSTEM.

These instructions are intended to acquaint you with the many unique features of this modern, state-of-the-art equipment. Please read them carefully so that you may obtain maximum success and enjoyment from its operation.

We ask that you pay particular attention to the design of the transmitter. Notice that it has been human engineered for the most natural and precise control of your choice of operating cars or boats.

Be certain to read all of the material in this manual, as well as that in the Fundamentals and Guidelines Manual.

**SAFETY FIRST FOR YOURSELF, FOR OTHERS AND FOR YOUR EQUIPMENT**

"SAFETY FIRST" is more than just a slogan when operating radio controlled models. Thus, we urge, especially with respect to radio controlled aircraft that:

**FOR YOUR SAFETY:****AT THE TRACK OR LAKE...**

DO NOT OPERATE YOUR TRANSMITTER unless your frequency is "clear". The transmitting signal frequency and/or channel number is shown on the transmitter and YOU MUST NOT turn on your transmitter while someone else is operating their model on that same frequency.

**WARNING: IF YOU DELIBERATELY OR ACCIDENTALLY TURN ON YOUR TRANSMITTER WHILE ANOTHER MODEL IS IN OPERATION, THAT MODEL WILL GO OUT OF CONTROL.** The same will happen to yours, so observe "clearing" the frequency: Only one person using a given frequency at a time. DO USE FREQUENCY FLAGS for the frequency your system uses and attach the appropriate flags to your transmitter antenna. DO OBSERVE all of the rules of the operating or flying site.

**FREQUENCY IDENTIFICATION AND DISPLAY SYSTEM**

The Federal Communications Commission (F.C.C.) specifies radio frequencies in MHz units. For convenience, the frequencies are designated by CHANNEL number or by colors. The frequencies for each band are listed in MHz and are designated as indicated. Numbered channel markers on the transmitter identify the specific channel. A yellow wind streamer identifies a 75 MHz transmitter.

75 MHz Non-Aircraft Band	
CHANNEL	FREQUENCY (MHz)
61	75.410
62	75.430
63	75.450
64	75.470
65	75.490
66	75.510
67	75.530
68	75.550
69	75.570
70	75.590
71	75.610
72	75.630
73	75.650
74	75.670
75	75.690

76	75.710
77	75.730
78	75.750
79	75.770
80	75.790
81	75.810
82	75.830
83	75.850
84	75.870
85	75.890
86	75.910
87	75.930
88	75.950
89	75.970
90	75.990

27 MHz Surface		
CHANNEL	FREQ. (MHz)	SINGLE FLAG COLOR
1	26.995	Brown
2	27.045	Red
3	27.095	Orange
4	27.145	Yellow
5	27.195	Green
6	27.255	Blue

**WARNING:** The 75 MHz frequencies allocated for Model Radio Control use are exclusive; however, they are in close proximity to other types of radio usage in certain areas. Before operating your Model, check with the FCC Regional Office in your area to determine whether there is a potential danger of interference from other radio users. The FCC offices are usually listed in your telephone directory under the section designated to United States Government Offices. When dealing with the FCC, you should state the type of activity you are involved in (i.e., radio control of model boats or cars) and inquire if there are any commercial RF transmitters on or close to your frequency in Megahertz (MHz). Do not use R/C channel numbers since the FCC will not be able to correlate them with actual frequency. "Outside" radio interference may cause you to lose control of your model, possible resulting in injury to yourself or others, or property.

**SO REMEMBER:**

1. DO NOT OPERATE your transmitter at the track or lake, until you are certain your frequency is "clear".
2. DISPLAY your frequency flag colors and channel identification on the antenna of your transmitter.
3. REMEMBER that flags do not usually state the frequency on them and sometimes the colors are hard to distinguish. If you have an eyesight limitation or defect such as color blindness, double check the frequency flag designations with someone else.
4. Turn your transmitter on only when you are sure no one else is using your frequency.
5. **WARNING:** Your model will go out of control and may cause some serious injury or damage if someone else turns on a transmitter on your frequency while you are operating your model.
6. Respect all the rules of the operating site.
7. At any time during the operation of your model, should you sense, feel or observe any erratic operation or abnormality, end your operation as quickly and safely as possible. DO NOT operate again until you are certain the problem has been corrected. TAKE NO CHANCES.

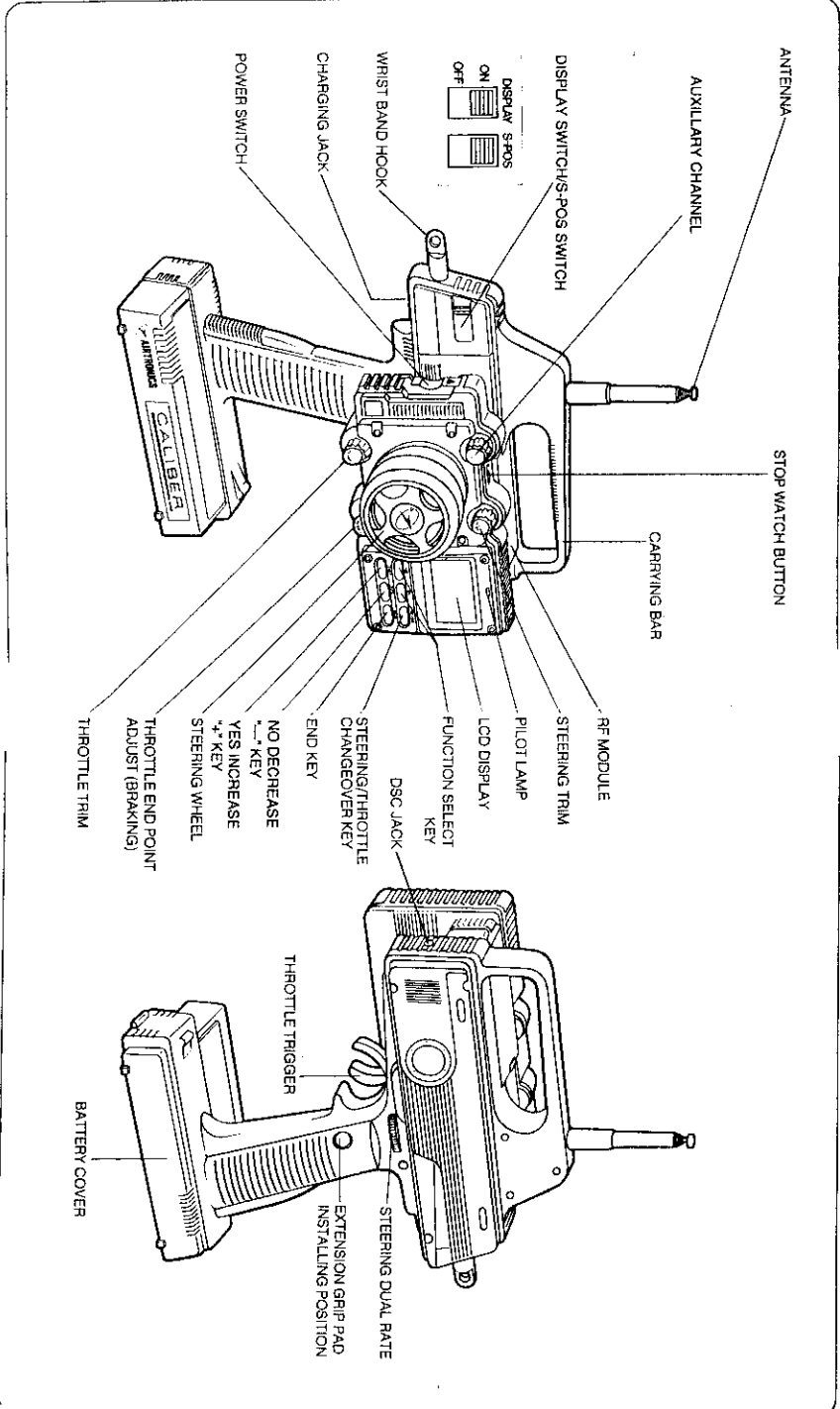
# FEATURES

2

## TRANSMITTER:

- **INTELLIGENT COMPUTER PISTOL GRIP SYSTEM:** It features the first Multi-function display for R/C car and boat use. Each function can be quantitatively set. Data can be properly stored and easily copied for additional vehicles.
- **FM COMPUTER SYSTEM:** Real time Servo-response with no delay.
- **DATA MEMORY:** 3 kinds of data memory are available in response to settings.
- **TRIM MEMORY:** Trim positions of steering and throttle can be memorized.
- **ADVANCED AND HIGHER POTENTIAL ERGONOMICS:** Well balanced design with coaxial wheel and grip.
- **DIAL TRIM CENTRALIZED DISPOSITION DESIGN:**
- **INTERCHANGEABLE DRIVING POSITION:** Transmitter can be changed so it can be operated by either the left or the right hand.
- **EXTENSION GRIP PAD:** Regardless of the size of the hand, the best holding position can be secured.
- **ADJUSTABLE RATE CONTROL:** Characteristics of steering and throttle can be adjusted freely from mild to quick.
- **ADJUSTABLE RATE CONTROL POINT:** Variable points of Adjustable Rate control can be altered.
- **STEERING DUAL RATE:** Even during a race, the amount of throw of the steering servo can be easily adjusted by the dial in the grip.
- **END POINT ADJUSTMENT:** Adjustments of amounts of hi-brake of the throttle and left/right steering can be adjusted independently.
- **STARTING POSITION SWITCH:** Idle-up at engine start of engine powered cars can be done just by one switch.
- **KEY-LOCK:** Protects important data from elimination.
- **MODEL SELECT:** Three different setups can be programmed.
- **DATA COPY:** Data already set can be transferred to another model.
- **DATA RESET:** Clears model data to factory default settings.
- **STOP-WATCH WITH ALARM:** It is useful for lap-time computation, fuel-measurement and training.
- **DISPLAY SWITCH:** Allows the setting of functions on the display without transmitting RF.
- **DIRECT SERVO CONTROL:** Allows the modeler to adjust the linkage of R/C car without transmitting RF.
- **REVERSE SWITCH:** Allows reversal of the servo direction.
- **DISPLAY OF POWER VOLTAGE:** The supplied voltage is displayed digitally, ranging from 8 to 13.1V at 0.1V increments.
- **COMMAND SIGNAL ON-OFF SWITCH:** Provides the capability to switch the input signal beeper either OFF, or to ON when ever a key is pressed.
- **BATTERY ALARM:** An audible low voltage alarm is included in the transmitter.
- **WHEEL TENSION:** Adjusts tension of steering wheel.
- **INTERCHANGEABLE MODULE SYSTEM:** Frequency can be changed from the 27 MHz to the 75 MHz band.
- **CARTRIDGE BATTERY:** Provides an instant replacement of batteries, when the optional TX NiCd is used.

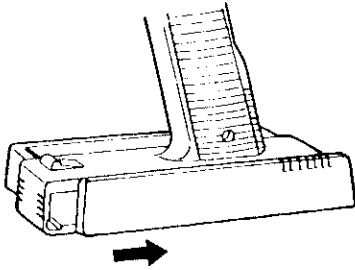
TRANSMITTER:



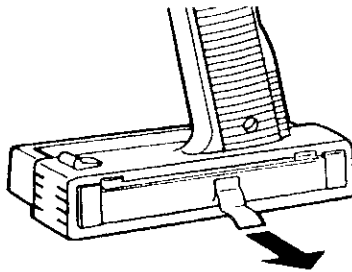
# TRANSMITTER

## METHOD OF REPLACING BATTERIES

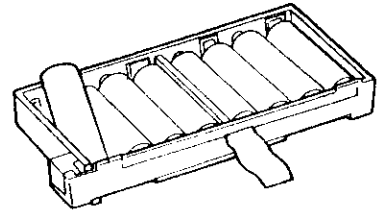
- 1** Remove the battery cover by sliding it to the direction as shown.



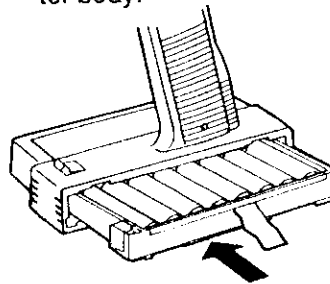
- 2** Pull the ribbon to take the dry battery cartridge out.



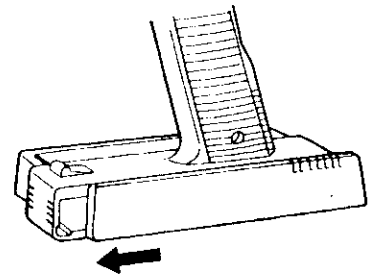
- 3** Lay batteries on mounting plate as shown. Observe polarity.



- 4** Insert the dry battery cartridge into the transmitter body.



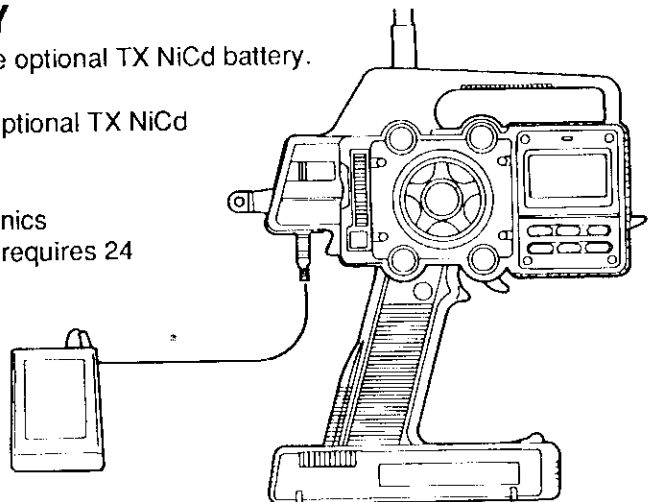
- 5** Install the battery cover in place.



## OPTIONAL TX NiCd BATTERY

Follow the instructions below when using the optional TX NiCd battery.

- 1** Take the dry battery out and insert the optional TX NiCd battery P/N 95016 in its place.
- 2** Be sure to charge the battery with Airtronics charger P/N 95033. The initial charging requires 24 hours. 10 hours are required for subsequent charging.

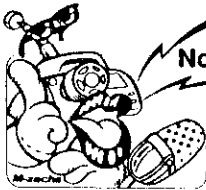


## RX BATTERY

- The 6 or 7 cell NiCd car battery provides power for the car motor, electronic speed control (ESC) Receiver and steering servo.
- The P/N 95007 5-cell NiCd battery is used as the power source for an engine powered car.

**1** Charge the 95007 NiCd battery for engine-car with the Airtronics P/N 95033 charger.

**2** The initial charging requires 10 hours. Subsequent charge time should be 8-10 hours.

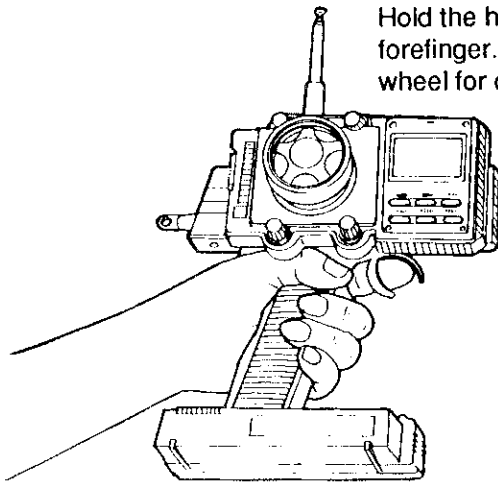


- Note:**
- A low battery voltage audio alarm is incorporated into the Caliber 3P transmitter which will sound when the transmitter voltage drops to a predetermined level (9.1 volts). If the alarm sounds operation should be discontinued and the battery pack exchanged or recharged.
  - Pay attention to the polarity (+,-) when installing dry batteries.
  - Charge NiCd battery with Airtronics charger 95033. Charging with other chargers may be the cause of shorter battery life and ineffective charging.
  - When charging, be sure to switch OFF the transmitter, receiver, and electronic speed control.
  - Never use individual NiCd cells in the dry battery cartridge because it can cause a malfunction due to bad contact.

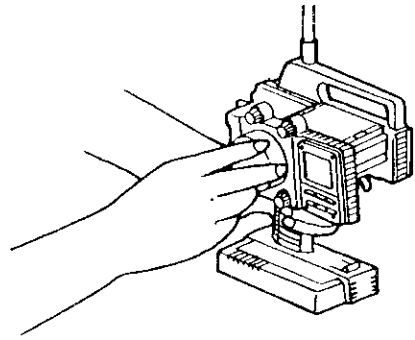
## DRIVING POSITION

The Caliber 3P transmitter features an all new transmitter case design, ergonomically configured for proper balance and comfort with ease of data input. It has a changeover mechanism for right or left hand driving position regardless of one's dominant hand.

## HOW TO HOLD THE TRANSMITTER



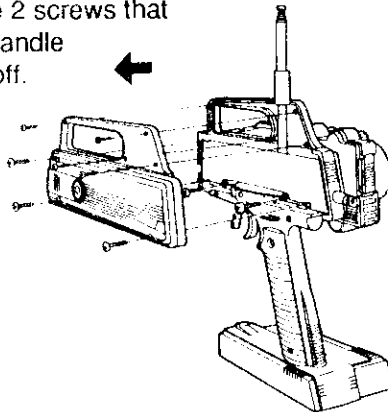
Hold the handle with the left hand, and grip the trigger with the forefinger. Then place the right hand lightly on the steering wheel for control. Enjoy the natural driving feel as illustrated.



## HOW TO CHANGE LEFT AND RIGHT OF DRIVING POSITION

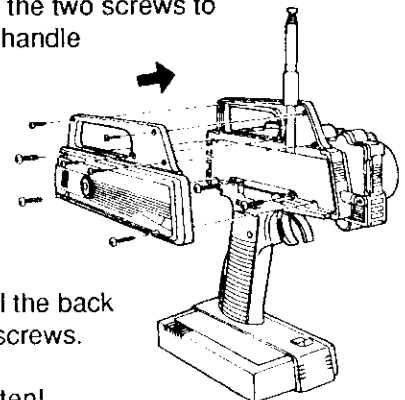
- 1 First remove the transmitter battery. Then remove the 7 screws from the back lid of the transmitter and take the lid off.

- 2 Remove the 2 screws that attach the handle and take it off. Be careful not to put excessive pressure on the wires.



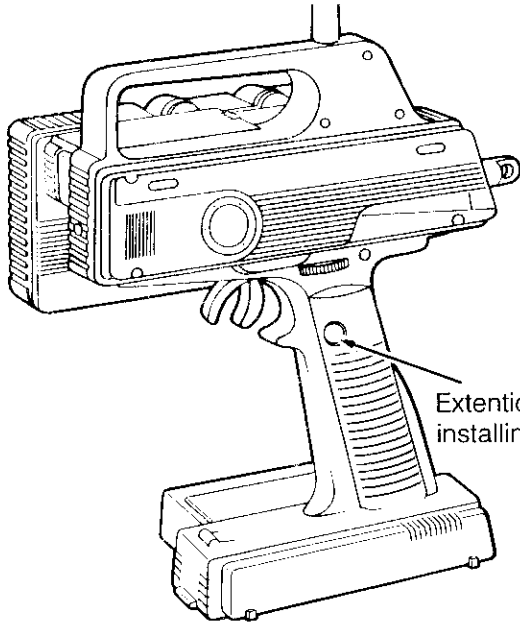
- 3 Rotate and install the handle as illustrated. Be careful!

- 4 Reinstall the two screws to hold the handle in place.



- 5 Reinstall the back lid with screws. Do not overtighten!

## EXTENSION HANDLE PAD



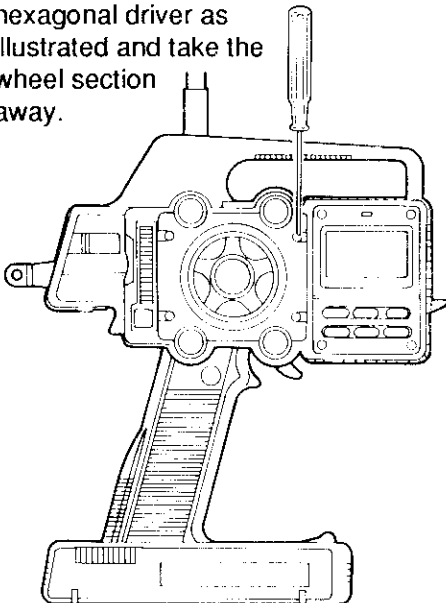
Install the Pad when you desire a larger grip surface. Apply the enclosed piece of double side adhesive tape to the grip pad and attach it to the transmitter body.



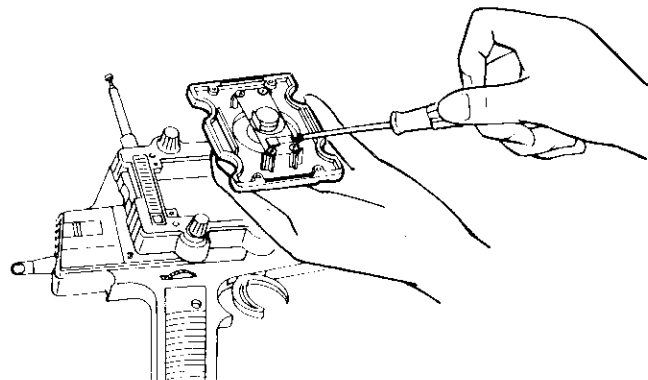
Extension grip pad installing position.

## ADJUSTMENT OF WHEEL TENSION ADJUSTER

- 1** First remove the transmitter battery, then remove the 4 screws with a hexagonal driver as illustrated and take the wheel section away.



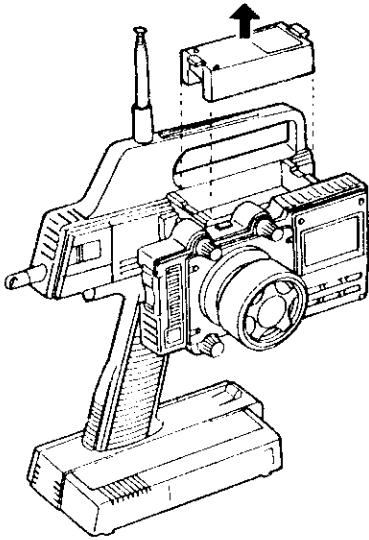
- 2** Adjust the degree of tension screw with a phillips screw driver.



- 3** Install the wheel section in place, being careful not to overtighten the screws.



## METHOD OF REPLACING TX CRYSTALS



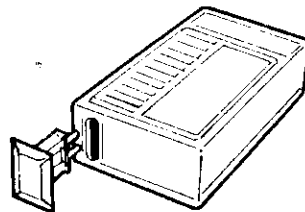
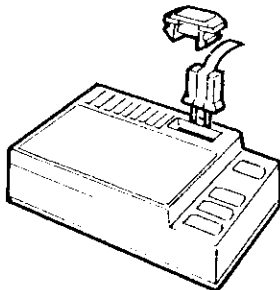
- 1** Remove RF module from the Caliber's body.
- 2** Remove the crystal from the RF module and insert the one desired instead.
- 3** Insert the RF module into the transmitter body, being careful to align the pins into the RF socket.

### NOTE:

- RF module is exclusive to Caliber, so it is not interchangeable with other RF modules.
- RF module should be installed firmly. Improper attachment may cause malfunction. See that it is stable.
- Change the channel indicator on the transmitter every time the channel is exchanged.
- Match the crystals of both the transmitter and the receiver by checking their channel number or frequency.

## METHOD OF REPLACING RX CRYSTALS

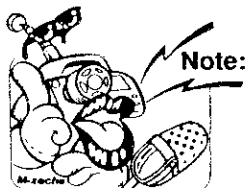
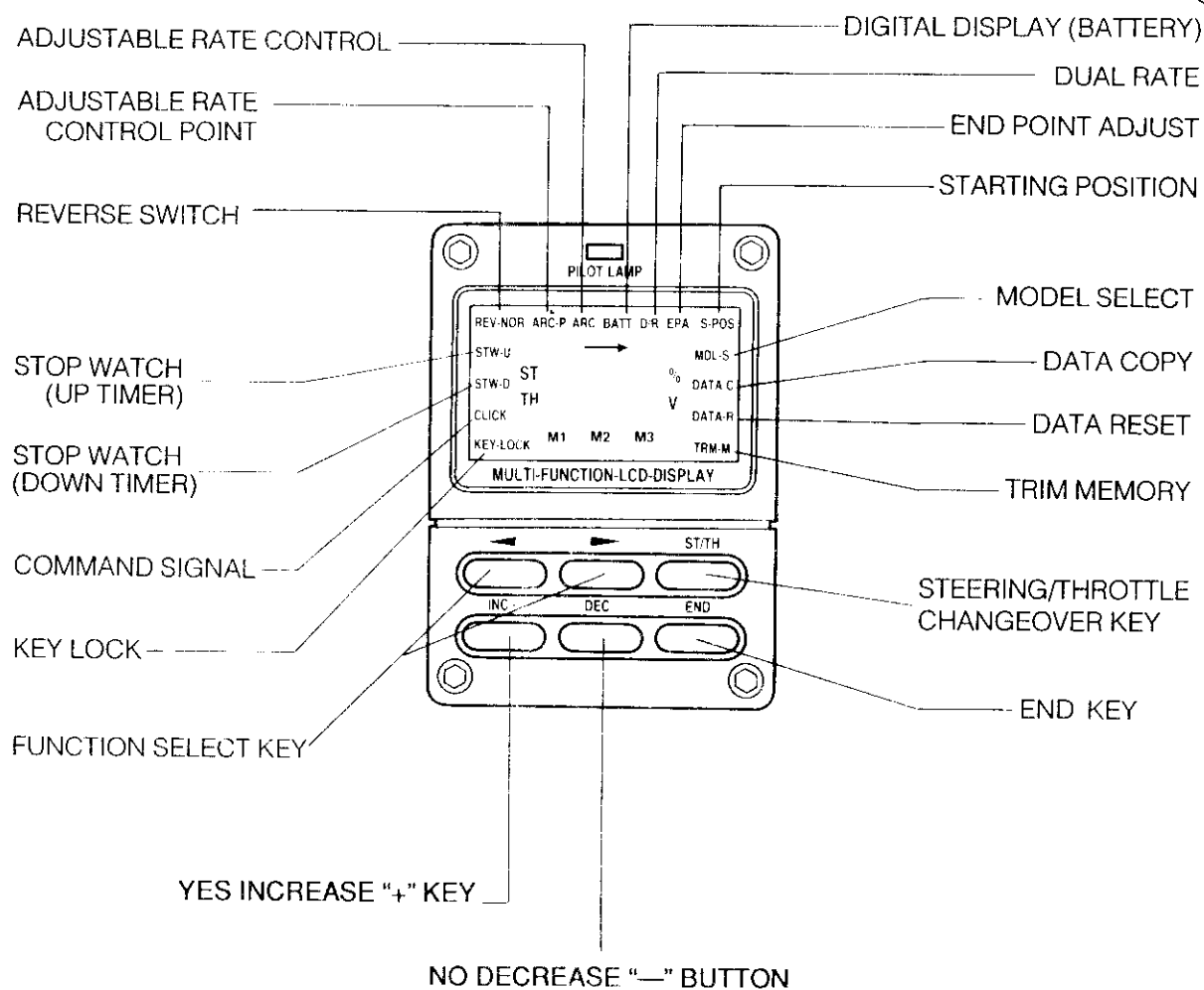
- 1** Take the crystal cap off the Receiver when replacing the crystal with a new crystal.
- 2** Do not fail to attach the crystal cap to protect the crystal.



## DISPLAY PANEL

The Caliber takes pride in its multiple function display that gives its operator all the functions at a glance. It enables the various functions to be set in numerical control, stored, copied and it provides confirmation of data on its display panel.

## INDICATION OF DISPLAY PANEL

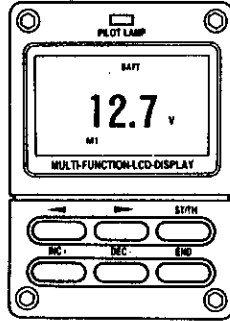
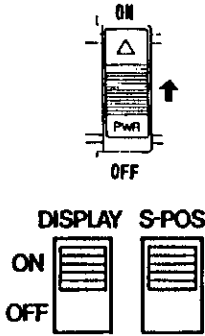


- Be sure to contact the Airtronics service department when it is necessary to replace the back-up lithium battery. If the back-up lithium battery fails, all data, including the default settings, will be lost. The life of the back-up lithium battery is approximately 5 years.

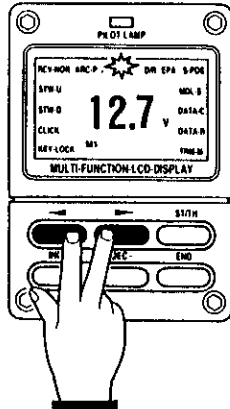
# OPERATION OF DISPLAY PANEL

Example setting at factory shipment

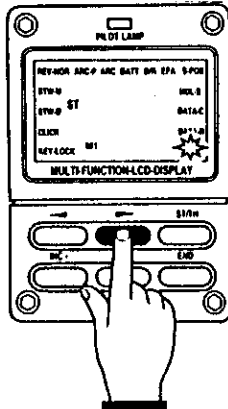
- 1** Turn ON the power-switch or the display-switch.
- The alarm sends out a bleep.



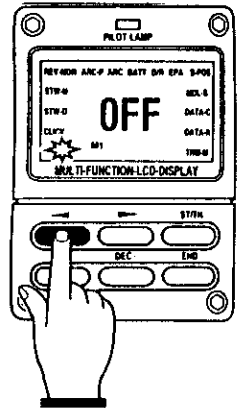
- 2** Pressing the two function select keys simultaneously generates the numeral on the display panel as illustrated.
- Cursor indication on BATT blinks on and off.



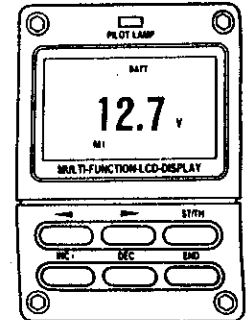
- 3** Pressing the function select key continuously allows the cursor to move on from D/R., EPA., S-POS, and to TRM-M.
- TRM-M indication blinks on and off.



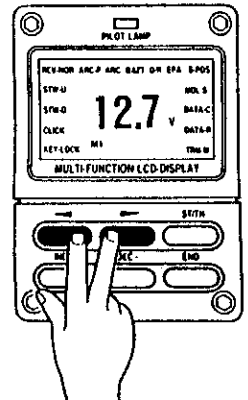
- 4** Pressing the function select key continuously allows the cursor to move on from ARC., ARC-P., REV-NOR, and to KEY-LOCK.
- KEY-LOCK indication blinks on and off.



- 5** Pressing the END key changes the display as illustrated.



- 6** Pressing the two function select keys simultaneously takes you back to the initial display.

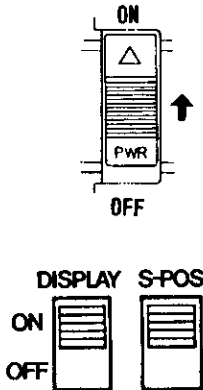


Fixed state of the cursor when pressing either of the two function select keys may be caused by the KEY-LOCK function. Refer to P.27 for the release of the KEY-LOCK function.

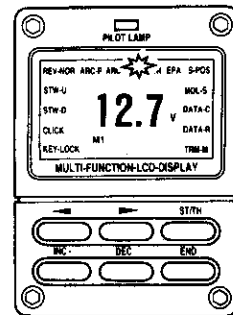
# DIGITAL INDICATION OF POWER SOURCE VOLTAGE

Example setting at factory shipment

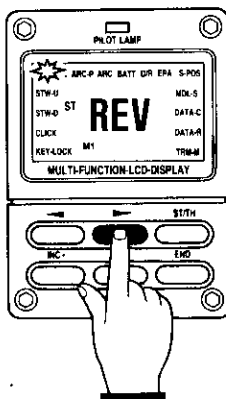
- 1** Turn ON the power-switch or the display-switch.
- The alarm sends out a bleep.



- 2** An image with the cursor blinking on BATT appears on the display panel.
- The voltage of the power source battery is digitally indicated.
  - When the voltage of the power source drops down to 9.1V an alarm will sound. If the alarm sounds, operation should be discontinued and the battery pack exchanged or recharged.



- 3** When there is no indication on BATT, press one of the function select keys to move the cursor.
- Pressing the function select key Button allows the cursor to move to the right. Pressing the function select key Button allows the cursor to move to the left.

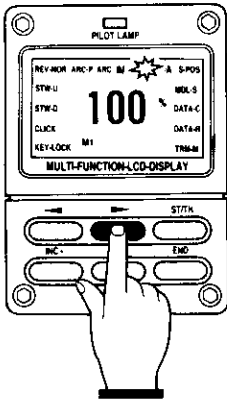


# DUAL RATE

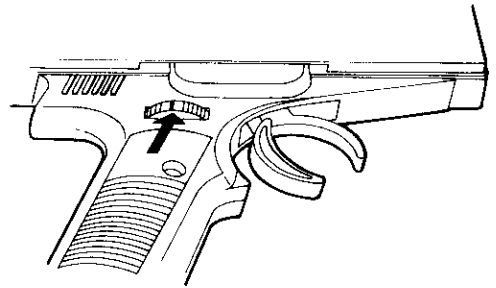
This function should be applied when there is a condition of either understeering with a deficient steering angle or oversteering with an excessive one.

Example: To set the steering dual-rate at 80%.

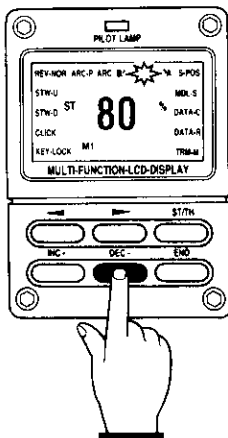
- 1 Press one of the function select keys to move the cursor onto D/R. The D/R indication will blink.



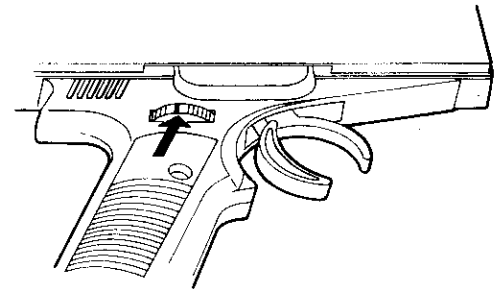
- 2 Set the steering dual-rate dial in the grip section at its central position, which is indicated by the small indentation in the thumb wheel.
  - Setting the dial at its central position allows the transmitter to control either understeering or oversteering in running.



- 3 Press the No-decrease-minus (DEC-) key to set the steering dual-rate at 80%.
  - Pressing the INC+ key will increase the steering angle, while pressing the DEC- key will decrease it.
  - Pressing the INC+ key and the DEC- key simultaneously sets the steering dual-rate at 100%. (When the dial is fixed at its central position).



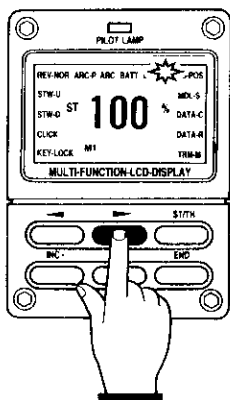
- 4 The steering dual-rate dial in the grip section will control the adjustment for the steering dual-rate during a race.



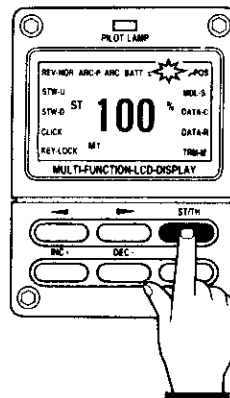
# END-POINT-ADJUSTMENT

This function should be used when the cornering radius differs for the right cornering and the left one owing to the differences in the rolling characteristics of the linkage and chassis or the diameter of tires.

- 1 Press one of the function select keys to move the cursor onto EPA, which will blink.



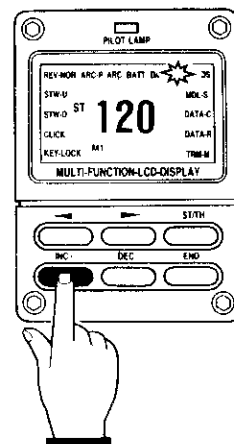
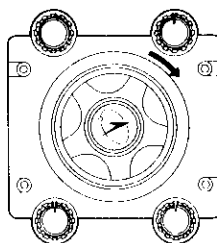
- 2 Press the Steering/Throttle Changeover key (ST/TH) to set the channel for Steering (ST).



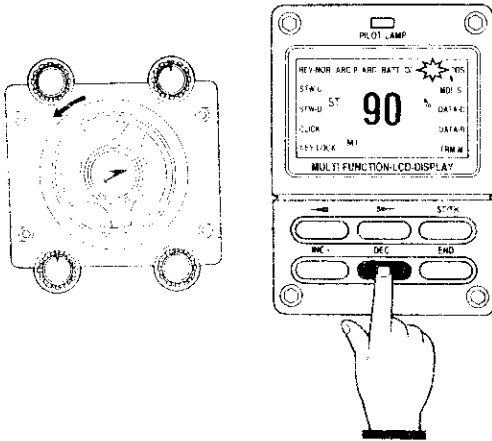
- 3 Set the right and left angles for the steering as follows.

1. Turn the steeringwheel to the right and set the right steering angle with the INC+ key or the DEC- key as desired.

- Pressing the INC+ key will increase the steering angle, while pressing the DEC- key will decrease it.
- Pressing the INC+ key and the DEC- key simultaneously sets the steering EPA at 100%.

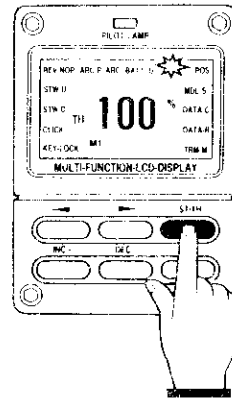


- 3 II.** Turn the steeringwheel to the left and set the left steering angle with the INC+ key and the DEC- key.



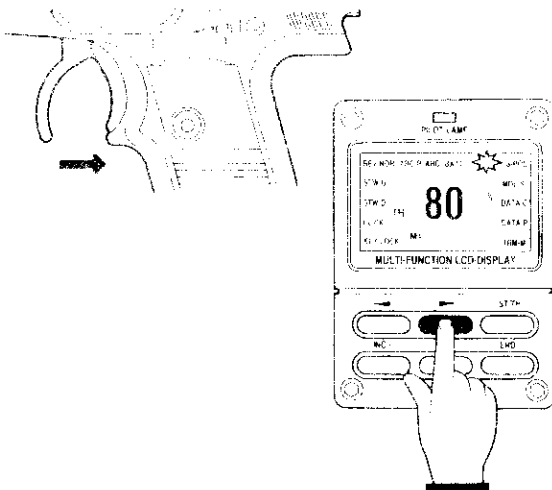
- 4** The following inputs are used to set the high throttle position at the throttle side and the brake end point.

- I.** Set the channel at TH by pressing the ST/TH key.

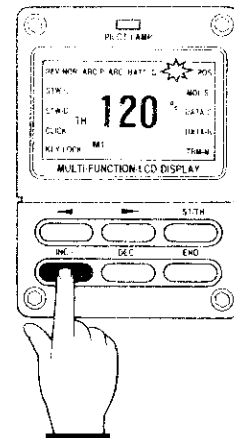
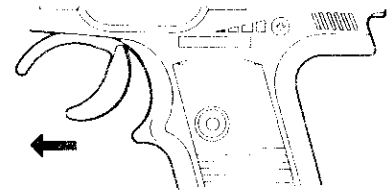


- 4 II.** Pull the throttle-trigger to its high position and set the high-position throttle servo through with the INC+ key and the DEC- key.

- Pressing the INC+ key will increase the servo throw, while pressing the DEC- key will decrease it.
- Pressing the INC+ key and the DEC- key simultaneously sets the throttle end points at 100%.



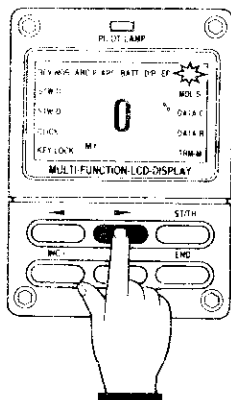
- 4 III.** Push the throttle-trigger to its brake position and set the brake-position end point with the INC+ key and the DEC- key.



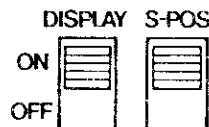
# STARTING POSITION SWITCH

This switch is used exclusive for an engine-powered car. It is not used for an electric R/C car, therefore set the S-POS at 0% when you are using the Caliber 3P with an electric powered car. This function improves the starting efficiency of the engine by increasing the idling of the engine at starting time.

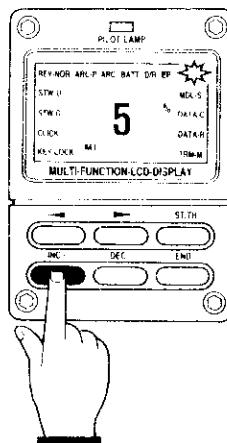
- 1** Press one of the function select keys to move the cursor onto S-POS.



- 2** Turn on the Starting-position Slide Switch (S-POS) located next to the Display Switch.



- 3** Set the starting-position a little higher than the slow position with INC+ and DEC- keys.
- Setting the starting-position over 0% will sound an alarm.
  - Turning off the S-POS switch will turn off the alarm.

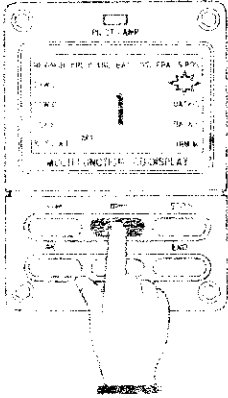




## MODEL SELECT

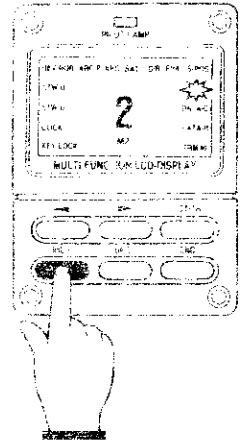
The Caliber transmitter has the memory capacity of up to three types of data (data for three different RC cars) and Model select is the function which can input three types of data, M1, M2, and M3 into the memory and reproduce any one of them at one's convenience.

- 1** Press one of the function select keys to move the cursor onto MDL-S, which will blink.



- 2** Press either the INC+ key or the DEC- key to select the model.

- Pressing the INC+ key will change the current display indication as M1 to M2 to M3.
- Pressing the DEC- key will change the current display indication as M3 back to M2 to M1.



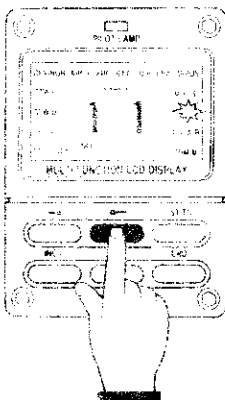
Model select function is very useful for memorizing the data meeting the various factors for a R/C car such as setting varied data for different circuits, road condition of the same circuit, motors (engines), tires, and suspensions.

## DATA COPY

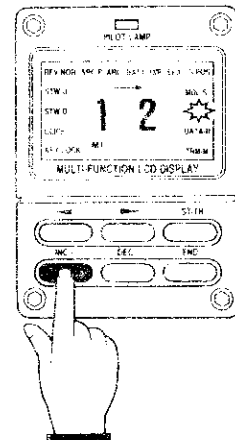
The data already defined can be transferred to another model.

Example: To transfer the data memorized in M1 to M2.

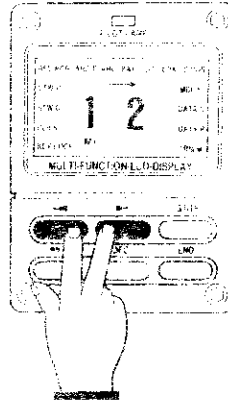
- 1** Press one of the function select keys to move the cursor onto DATA-C, which will blink.



- 2** Press either the INC+ key or the DEC- key to set the indication at 1 → 2.



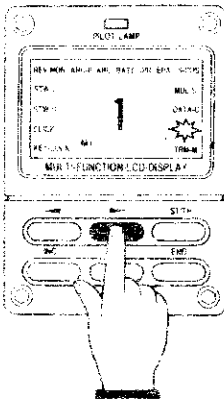
- 3** Pressing the two function select keys simultaneously will get the data memorized in M1 transferred to M2



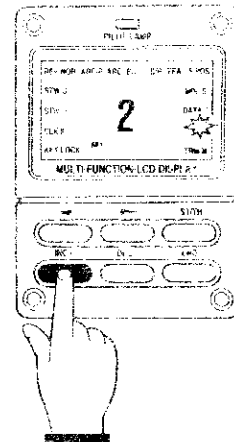
## DATA RESET

This function should be used to reset the data currently of no use.

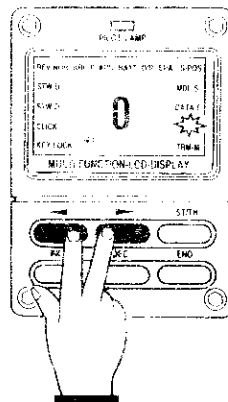
- 1** Press one of the function select keys to move the cursor onto DATA-R, which will blink.



- 2** Press either the INC+ key or the DEC- key to indicate the model desired to be reset to default values.



- 3** Pressing the two function select keys simultaneously changes the indication to 0 to show that the model has been reset.

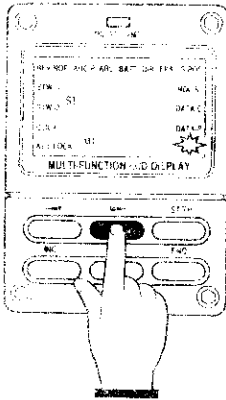


# TRIM MEMORY

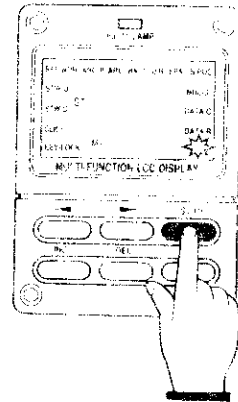
This function memorizes the neutral positions of the steering and the throttle. The input of the neutral positions makes the steering and the throttle go back to their memorized neutral positions regardless of their trim position, when the power switch is turned on.

Example: To adjust the steering at its neutral position.

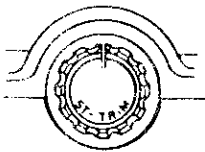
- 1 Press one of the function select keys to move the cursor onto TRM-M, which will blink.



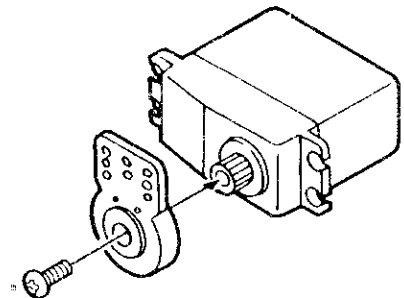
- 2 Press the Steering/Throttle Changeover key (ST/TH) to set the channel for steering (ST).



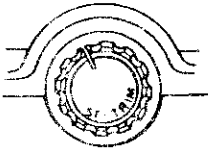
- 3 Set the steering-trim knob at its neutral position.



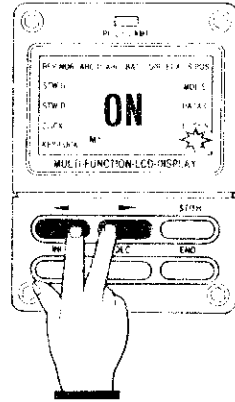
- 2 Fix the servo-saver-horn on the Steering Servo at the angle best suited for the neutral position.



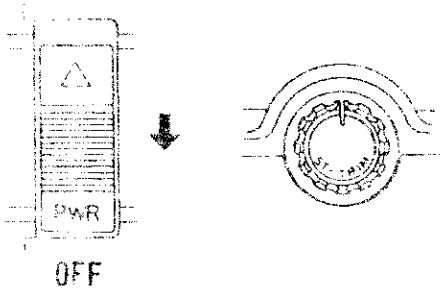
- 5** Establish the neutral position of the steering-servo on the steering-trim.



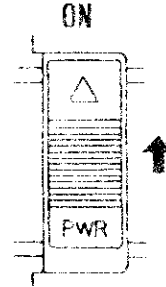
- 6** Pressing the two function select keys simultaneously as shown will generate the indication of ON on the display to show the trim has been memorized.



- 7** Turn off the power switch of the transmitter and set the steering-trim at its central position.



- 8** Turning the power switch of the transmitter ON will generate the memorized trim position.



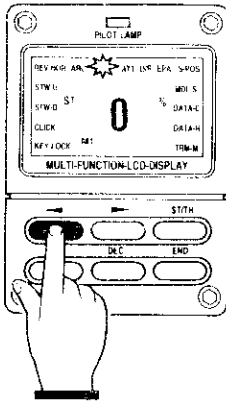
- 9** Push the ST/TH change over key to display and input throttle data. Set the throttle TH-TRIM at its neutral position and perform the steps for throttle trim in the same manner as done for the steering.

# ADJUSTABLE RATE CONTROL

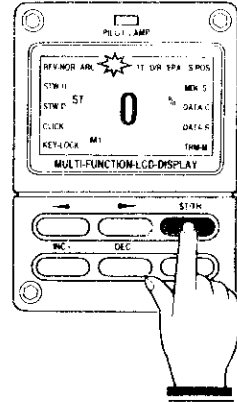
This function allows the proportional system to freely control various factors that a driver should deal with, such as the steering characteristics, road conditions and power-response of a R/C car.

Example: To adjust the steering part.

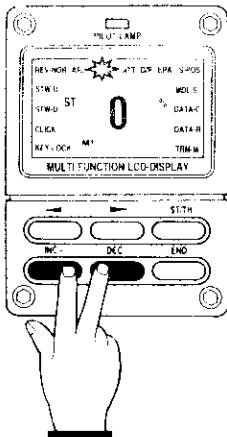
- 1** Press one of the function select keys to move the cursor onto ARC, which will blink.



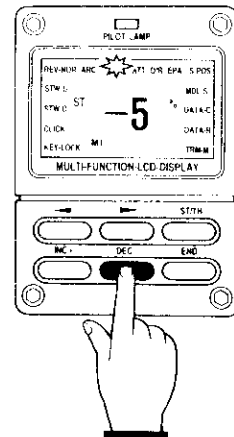
- 2** Press the Steering/Throttle Changeover key (ST/TH) to set the channel for steering (ST).



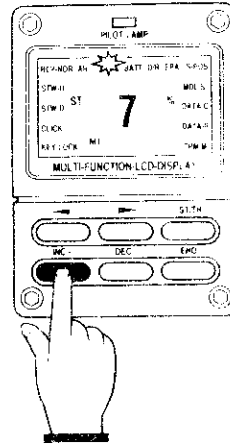
- 3** Press the INC+ key and the DEC- key simultaneously as shown to set the indication at 0% (normal).  
Run the R/C car to determine the required setting.



- 4** When the steering characteristic seems too sensitive, press the DEC- key to decrease it.

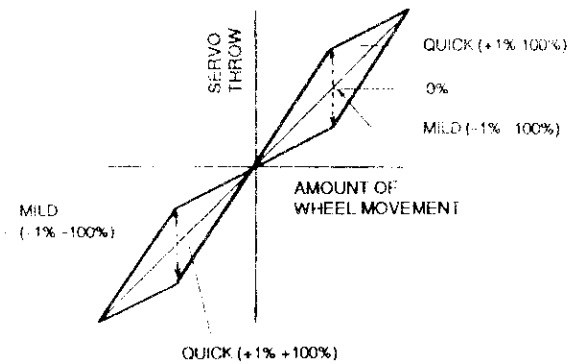


- 5** When the steering characteristic seems mild and the initial response is rather slow, press the INC+ key to increase it.

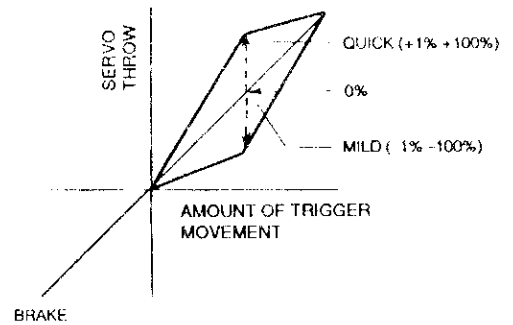


- 6** Set the adjustable-rate-control on the throttle side just in the same manner as for the steering. For those who do not use the adjustable-rate-control or when a setting has not been decided, press the INC+ key and the DEC- key simultaneously to set the indication at 0% (normal).

STEERING ADJUSTABLE-RATE CONTROL



THROTTLE ADJUSTABLE-RATE-CONTROL

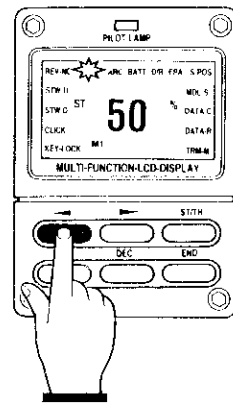
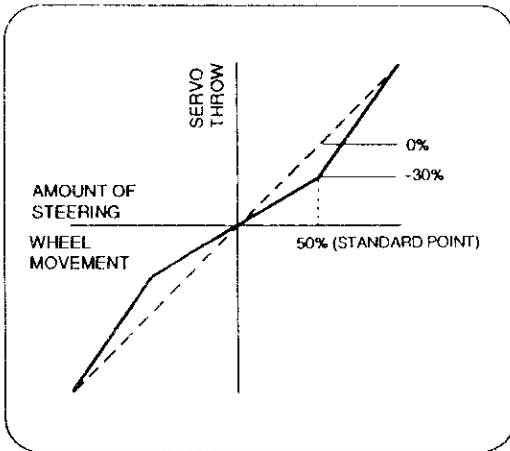


# ADJUSTABLE RATE CONTROL POINT

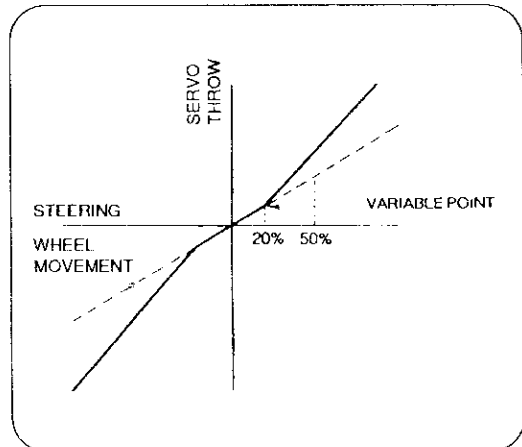
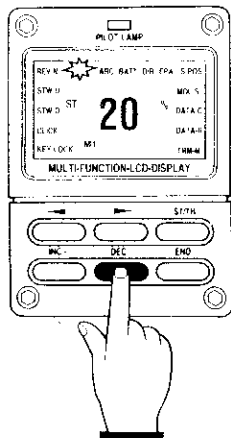
The changeability of the variable point on the adjustable-rate-control enables the proportional system to adjust delicate steering and throttle work on its part.

Example: To adjust the steering part.

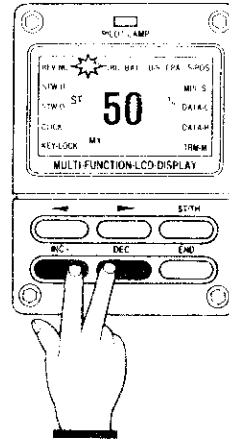
- 1 First set up the adjustable-rate-control as indicated in previous steps.
  - Adjust the variable Rate Control Point after setting the Adjustable Rate first at -30% as previously shown.
- 2 Next press one of the function select keys to move the cursor onto ARC-P, which will blink.
  - The basic point, 50%, will be indicated.



- 3 Set up the variable point by pressing the DEC- key.
  - Set the variable point at 20% as indicated here for your initial setting. Run your R/C car to determine the correct setting.



- 4** Pressing the INC+ key and the DEC- key simultaneously as shown will put the indication back to the basic point 50%.

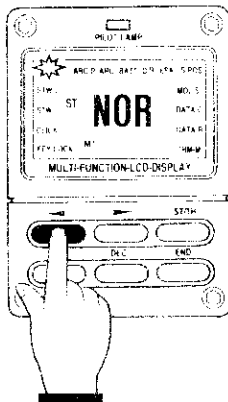


- 5** Adjust the adjustable-rate-control point on the throttle side just in the same manner as for the steering. The ST/TH key is used to select the throttle function.

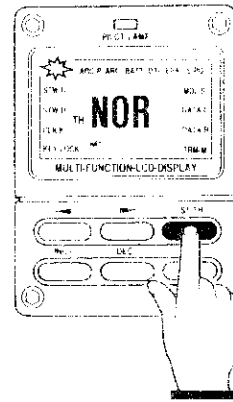
## REVERSE SWITCH

This function should be used to change the direction of the servo movement.

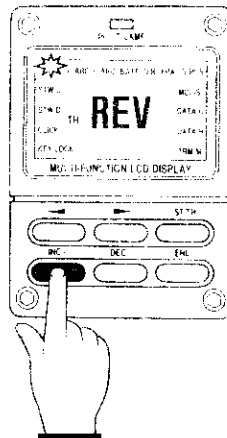
- 1** Press one of the function select keys to move the cursor onto REV-NOR, which will blink.



- 2** Press the Steering/Throttle Changeover key (ST/TH) to set up the channel for steering, throttle or auxiliary channels.



- 3** Press either the INC+ key or the DEC- key to change the direction of the servo movement.



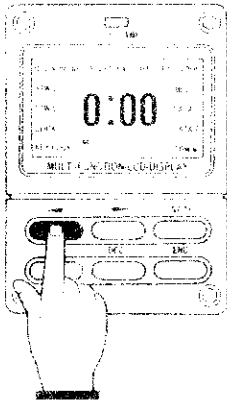


# STOPWATCH

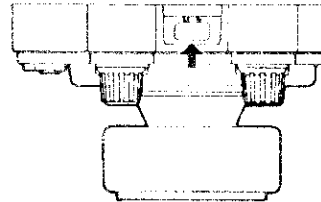
This function would be used to measure the running time of an electric powered car and the fuel-consumption, etc., of an engine powered car.

## USE OF UPTIMER

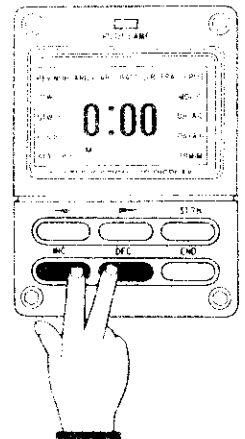
- 1 Press one of the function select keys to move the cursor onto STW-U, which will blink.



- 2 Pressing the Stopwatch Button on the upper part of the transmitter allows the timer to start. Pressing the button once again makes it stop. Pressing the button again will cause it to continue
  - The alarm sounds at every one minute.

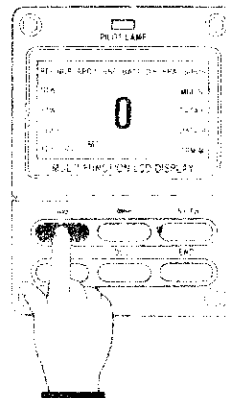


- 3 Pressing the INC+ key and the DEC- key simultaneously as shown will put the indication back to 0:00.
  - Time can be measured up to 59 minutes and 59 seconds

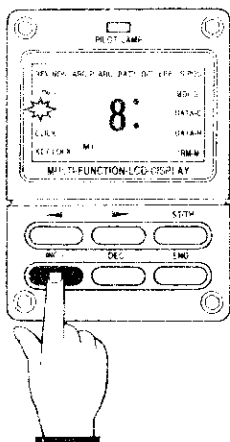


## USE OF DOWNTIMER

- 1 Press one of the function select keys to move the cursor onto STW-D, which will blink

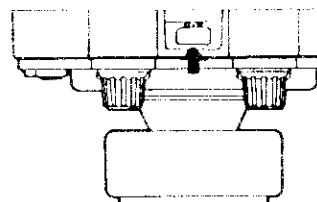


- 2** Press either the INC+ key or the DEC- key to set the time.
- Time can be measured up to 59 minutes.

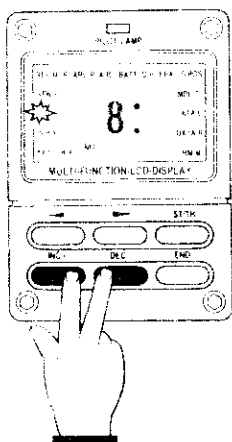


- 3** Pressing the Stopwatch Button on the upper part of the transmitter allows the timer to start. Pressing the button further on allows the timer to stop and start by turns.

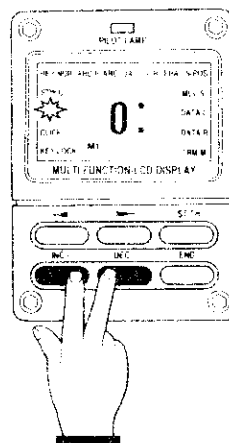
- The alarm will sound at 10 seconds before the set time and will count down in 1 second increments. After the set time, the timer switches to the up-timer.



- 4** Pressing the INC+ key and the DEC- key simultaneously as shown will put the indication back to the set numeral.



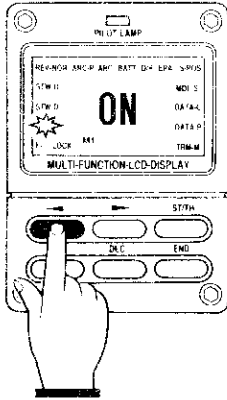
- 5** Pressing the INC+ key and the DEC- key simultaneously once again as shown will put the indication back to 0.



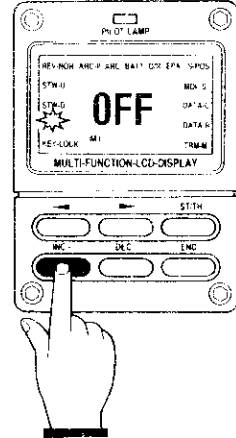
## COMMAND SIGNAL ON-OFF SWITCH

This function can turn ON-OFF the signal sound which rings for prevention of mistakes in pressing keys.

**1** Press one of the function select keys to move the cursor onto **CLICK**, which will blink.



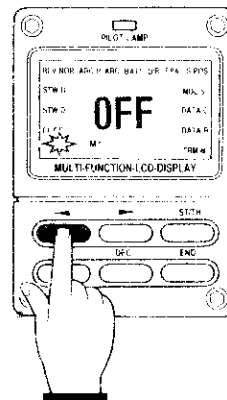
**2** Pressing either the **INC+** key or the **DEC-** key generates the changeover between ON-OFF.



## KEY LOCK

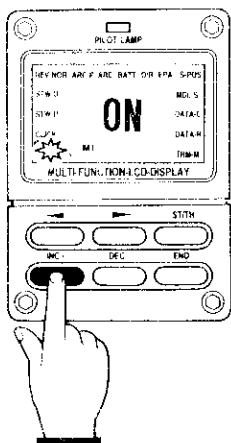
This function protects the data from being eliminated by mistake.

**1** Press one of the function select keys to move the cursor onto **KEY-LOCK**, which will blink.

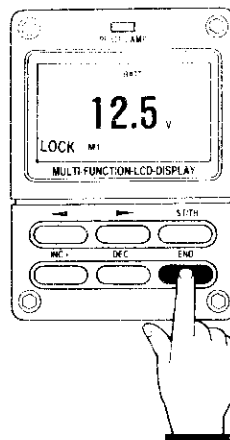


**2** Pressing either the INC+ key or the DEC- key generates the changeover between ON-OFF.

- Switching the KEY-LOCK ON will lock both the function select keys and the ST/TH Changeover key making them immobile.

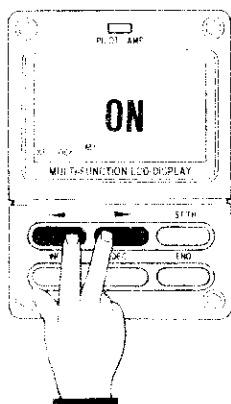


**3** Pressing the END key generates the indication as shown, and all the keys are completely locked.

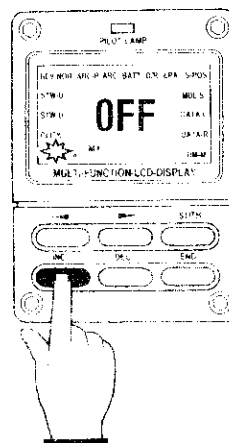


**4**

**I.** Pressing the two function select keys simultaneously 5 times (within 10 seconds) will change the current indication to ON.



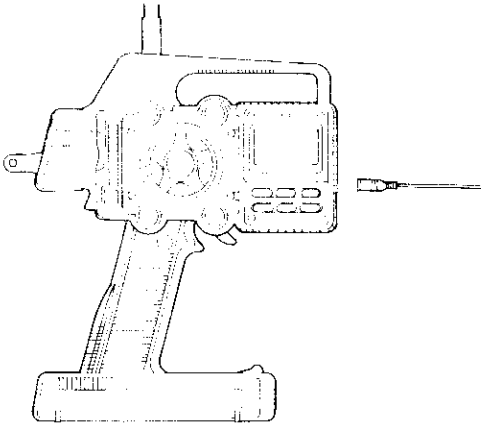
**II.** Pressing the INC+ key generates the indication as shown and the KEY-LOCK function will be released.



## DIRECT SERVO CONTROLLER

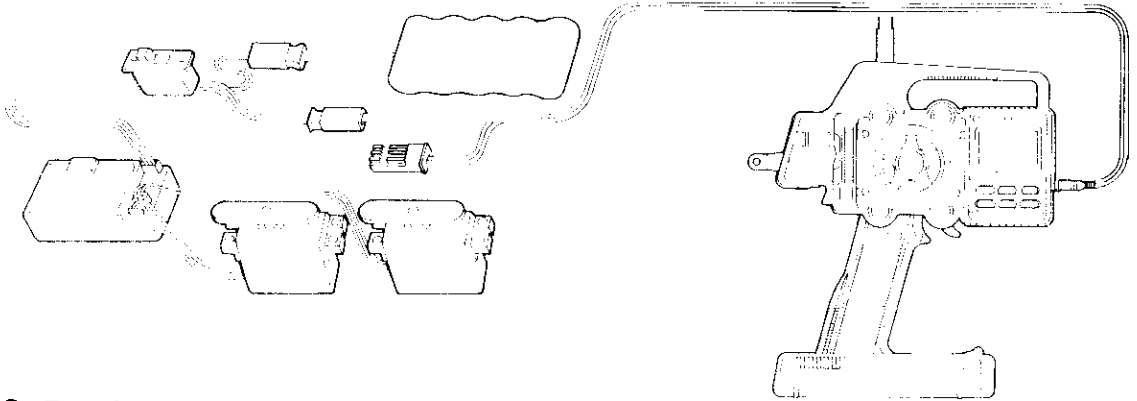
This should be used to adjust linkages etc., on your car, without transmitting RF, and the like while using the same frequency as someone else.

### How to handle the Direct-Servo-Controller with engine powered cars when the switch-harness equipped with DSC is in use.



- 1 Connect the attached DSC harness to the DSC jack on the side of the transmitter.
  - LCD display will be indicated.

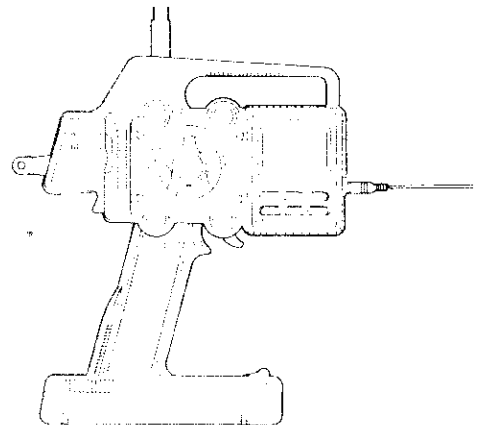
- 2 Join the charging connector of the switch-harness with the DSC harness.



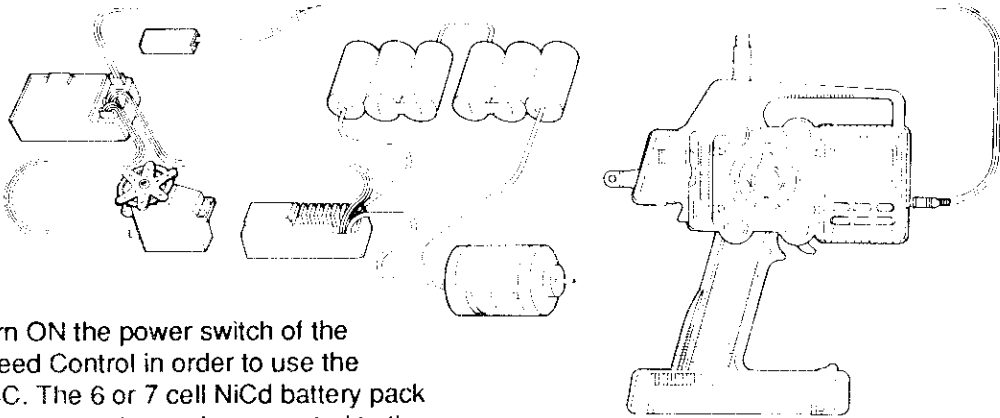
- 3 Turn ON the receiver switch for use.

### How to handle Direct-Servo-Controller when an Electronic Speed Control is in use.

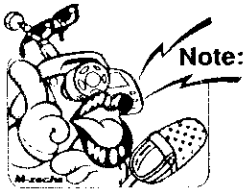
- 1 Connect the attached DSC harness to the DSC jack on the side of the transmitter.
  - LCD display will be indicated.



- 2** Connect the DSC harness to the battery channel of the receiver.



- 3** Turn ON the power switch of the Speed Control in order to use the DSC. The 6 or 7 cell NiCd battery pack that powers the car is connected to the Speed Control as indicated in the specific speed controls instructions.



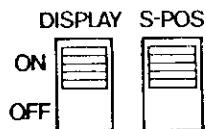
**Note:**

- When using the DSC, NEVER switch on the transmitter!
- When using the DSC, install batteries in the transmitter.
- After use of the DSC, make sure to disconnect the DSC cord.

## DISPLAY SWITCH

Setting and the confirmation of functions can be done on the LCD display without turning on the RF portion of the transmitter.

To use this function, open the side panel and turn the Display Switch ON.

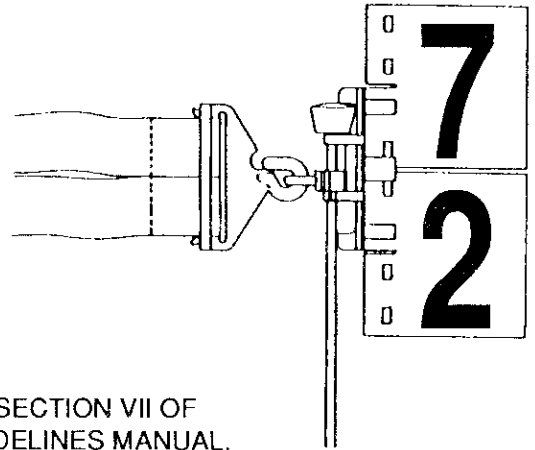


## CONNECTOR POSITION OF RECEIVER

RECEIVER NO.	POSITION
1	STEERING
2	THROTTLE
3	AUXILLARY
BATT (DSC)	BATTERY (DSC HARNESS)

### ASSEMBLY OF CHANNEL IDENTIFIER:

Your Airtronics channel identification plaques and flag are assembled to the holder as indicated. Note that the plaque holder is installed on the antenna so that it will not slide down the antenna.



FOR WARRANTY INFORMATION, PLEASE SEE SECTION VII OF THE INSTALLATION FUNDAMENTALS AND GUIDELINES MANUAL.