

SG-1272  
Active Gyro System

AIRTRONICS



# AIRTRONICS®

1995



AIRTRONICS



AIRTRONICS



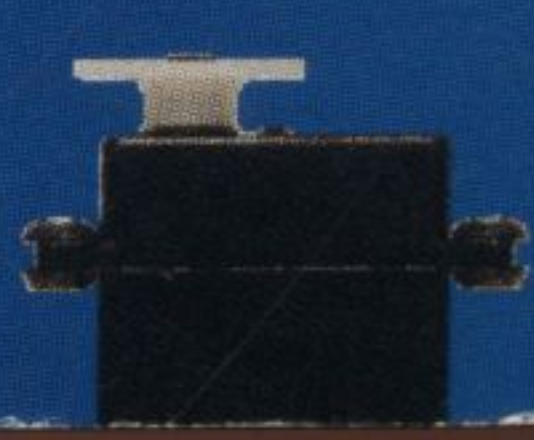
AIRTRONICS

AIRTRONICS

AIRTRONICS  
2.4 GHz FM  
Precision  
and Reliability

# CATALOG

OF COMPLETE SYSTEMS AND ACCESSORIES







# The Name Associated With Top Level Performance For All Radio Control Enthusiasts.

Whether you're a professional competitor, or just getting started in radio control modeling, you'll find that Airtronics' line of products includes everything to fit your needs. It is, quite simply, the highest quality and most complete line of R/C systems and accessories available today.

Our unrivaled customer service is one more thing that sets us apart from, and above, our competition. Indeed, over the years, we've established a reputation for offering the finest service in the industry. You can be sure to receive no nonsense replies when you need expert

advice. In fact, we've been listening to you since 1971, incorporating your ideas and requests into equipment designed specifically for the American modeler. In return, millions of R/C modelers just like you have chosen Airtronics for their R/C equipment needs.

## **AIRTRONICS ENGINEERING**

We are uncompromisingly committed to quality and technical innovation.

But what has this

commitment meant in the real world? Plenty — Airtronics was the first manufacturer to offer a true narrow band receiver that exceeds all guidelines for operation at 20 KHz channel spacing, which has become the standard of the R/C modeling industry. Another first is the introduction of the Caliber systems which were the first computerized radios for surface use.

Most recently, we introduced the Infinity 1000 and 660 series transmitters, the first revolutionary breakthrough in transmitter design in over 30 years and it stands as an example of the ultimate in technological and ergonomic sophistication.



*World and National Soaring Champion Joe Wurts uses Airtronics Infinity systems for his Airtronics Specialty Division Peregrine*

## **UNEQUALED SERVICE**

From our management to our service technicians we are personally involved with R/C modeling. We don't just support R/C clubs and participate in club events because it's good business — we do it because we love it.

Beyond our experience as enthusiasts, we know what you want because we encourage you to tell us. Whether you approach us in person or give us a phone call, you'll find yourself talking to someone who's friendly, knowledgeable and appreciates your input.





Well known modeler Nick Rivaldo chooses Airtronics guidance for his superb scale creations.

## SATISFACTION. TODAY AND TOMORROW

When it comes to judging an R/C system's performance, there's no better measurement than the objective criteria of races and championships won. Airtronics systems, we're proud to say, have proven themselves over and over again in world class competition.

What's the secret to maintaining a position on the leading edge of technological innovation? Part of it is an open minded attitude that encourages us to search out breakthrough concepts. We design all our systems for compatibility and offer a wide choice of accessory items for the discriminating modeler.

In addition, all of our advanced FM and PCM transmitters and compatible Gold Label Super Narrow Band Dual Conversion receivers have been independently tested and certified to exceed all FCC and AMA guidelines and specifications for true narrow band R/C operation. That means you can count on your Airtronics system to give you outstanding performance today and in the years to come. And to back up our commitment to your satisfaction, we offer a full one-year warranty on all Airtronics R/C systems.

Proof that when it comes to high performance R/C systems and accessories there's only one sure choice. Airtronics.

Multiple World and National Champion Joel Johnson uses Airtronics Caliber systems to control his R/C arsenal.



## GLOSSARY

### AM/AMPLITUDE MODULATION

A radio transmission system that varies signal amplitude for R/C operation.

### ATV/ADJUSTABLE TRAVEL VOLUME / EPA END POINT ADJUSTMENT

ATV allows up to a 70% reduction of servo movement in either direction from neutral, without affecting movement in the opposite direction. For example, if an installation required 85% throw in one direction and 96% in the other, ATV would allow the aircraft to be easily set up that way. By setting both sides to the same point, ATV can be used to reduce the total amount of throw without adjusting linkages.

### DIRECT SERVO CONTROLLER

By plugging a cable from the airborne system into the transmitter, all of the servos can be operated without sending a radio signal. This allows trims and controls to be checked and adjusted even while someone else is operating on your frequency.

### DR/DUAL RATE

Dual rate lets the modeler choose between full servo throw and reduced servo throw while operating the model. With the dual rate switch in the off position, 100% servo throw is available for maximum control response. Flipping the dual rate switch on, reduces servo throw and desensitizes the control response. The amount of throw in the "dual rate on" mode can be adjusted from 30% to 100% of total servo movement, allowing the modeler to tailor the system to individual preferences.

### EXPONENTIAL

If a radio is set up for exponential control response, the amount of servo movement is not directly proportional to the amount of control stick movement. Over the first half of stick travel, the servo moves less than the stick. This makes control response milder and smoothes out level flight and normal flight maneuvers. Over the last half of stick travel the servo gradually catches up with the stick throw, achieving 100% servo travel at full stick throw for aerobatics or trouble situations.

### FAIL SAFE

The primary purpose of a Fail Safe system in a PCM R/C unit is to provide smooth, interference-free flight. An additional benefit is the capability to program the R/C system for specific servo control throws if interference lasts longer than one second.

### FM/FREQUENCY MODULATION

This transmission system varies the frequency of signal wave for more effective interference resistance.

### MIXING

Allows two or more servos to be operated simultaneously from a single control input device.

### PCM/PULSE CODE MODULATION

An advanced transmission system that utilizes digitally encoded signals to minimize R/C interference.

### PLUG-IN RF MODULE

A plug-in module means that the radio frequency signal generating portion of the transmitter's

electronics can be easily changed.

This allows the same transmitter to be operated on different frequencies in the same band or to operate on either the 27, 50, 53, 72, or 75 MHz bands, by simply changing the RF module.

### SERVO REVERSING

This feature allows the modeler to reverse a servo's rotation at the flip of a switch. Servos can be mounted in the most convenient way without concern for their rotation direction. The proper movement can then be selected when the installation is completed.

### THROTTLE HOLD

A feature used in helicopter transmitters that allows a switch to freeze the throttle in a position while still allowing the collective pitch to be operated by the throttle stick.

### TRAINER SYSTEM

This feature allows two Airtronics transmitters to be coupled together by a cable so that both can be used to control the same airplane. A student pilot can gain training time while providing the instructor with a set of controls to take over at the first sign of trouble.

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# INFINITY

## ULTIMATE SYSTEMS FOR THE SOPHISTICATED R/C ENTHUSIAST

The Infinity 1000A and 1000H are engineered for serious R/C flyers who demand nothing less than the best. The Infinity 1000A and 1000H feature advanced computerized radio control technology in a transmitter case that feels just right. And with a range of features that provide superb flexibility, they represent the state of the art in the industry.

When the Infinity 1000 models were introduced, they represented a revolutionary breakthrough in transmitter design. Since then, while the competition has scrambled to catch up, the Infinity 1000s have been carefully refined to make them even better. Both models are 10-channel R/C units that include Airtronics Advanced Technology Radio Control System (ATRCS). With ATRCS and its high resolution 1,024-step technology and custom 10-bit analog-to-digital converter, you enter your commands and the Infinity automatically provides smooth, precise control response.

Both models also have Airtronics' Adaptive Intelligence Menu System (AIM). AIM allows quick, logical programming adjustments such as surface adjustments, mixing, control response, model configuration and diagnostics.

And talk about easy programming. Each Infinity 1000 transmitter has a large, touch-sensitive, bright supertwist custom LCD display so you can instantly input system commands without hassling with any awkward buttons. What's more, each transmitter has a custom 16-bit microprocessor and EE PROM software, allowing easy access to all programmable features and graphic displays.

To meet the special demands of competitive flyers, the Infinity 1000 series has a variety of other high-tech features. Each has Airtronics Advanced Technology Channel Protocol (ATCP), an intelligent data transmission system that reduces response time by transmitting control function data only to the channel you are using. ATCP automatically scans active channels up to 100 times per second and monitors

and updates unused channels twice each second. Both models also offer an optional microprocessor-based Phased Locked Loop (PLL) transmitter and receiver. This system, linked to the ATCP, lets the receiver talk to the transmitter via a cable, allowing you to scan or change any of the 72 MHz frequencies. Once you select a clear frequency you can program it in both the transmitter and receiver.

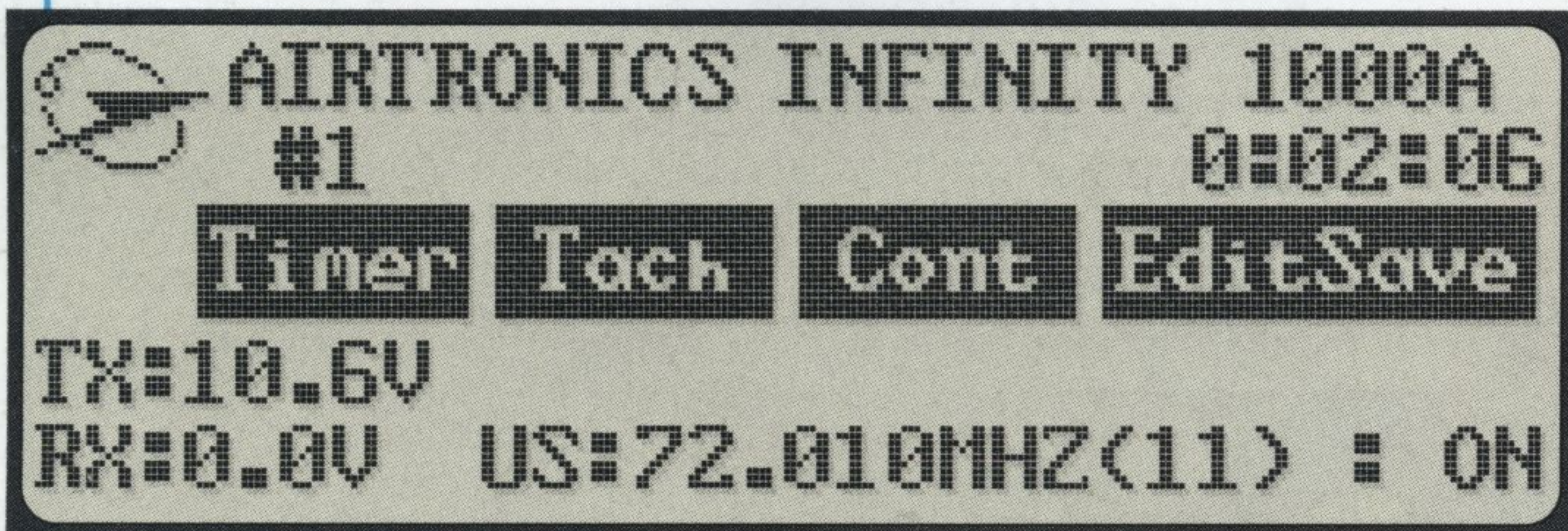
There is an Infinity model specially designed for both fixed-wing aircraft and helicopter pilots.

### INFINITY 1000 SERIES STANDARD FEATURES

- 1,024 Step Servo Resolution
- Large, Supertwist LCD Display with Contrast Adjustment
- Non Volatile Memory Storage Eliminates Backup Batteries
- Programmable Soft Switches (PSS)- allows any Function or Mix to be Assigned to Any Switch
- 10 Channel PLL Synthesized Transmitter Allows Scanner and Frequency Change Capability (optional Item)
- 10 Channel Dual Conversion PCM/FM Receiver or optional 10 Channel PLL Synthesized Receiver
- PCM or PPM operation - Allows Compatibility with Airtronics 8 and 10 Channel PCM/FM Receivers and 4, 6, 7, and 8 Channel PPM/FM Receivers, and generic FM Receivers on 72MHz
- Programmable Up/Down Timer with Audio Alarm
- Tachometer with Remote Sensor and On Screen Display of RPM
- Four Level Program Access Protection
- Multiple Model Memory - Allows 8 Model Setups
- Two Alternate Setups
- Model Naming Capability - up to 16 Alpha/Numeric Characters
- Audio Low Voltage Warning
- Trim Authority Adjustment
- Automatic Dynamic Trim Memory
- Channel Priority Assignment
- Adjustable Travel Volume - All Channels
- Electronic Servo Centering - All Channels
- 11 point Throttle Response Curve with Graphic Display
- Selectable Mode 1, 2, 3, or 4 Operation
- Channel Delay Option
- Cross Trim Capability for All Trims and Auxiliaries
- Servo Reversing - All Channels
- Transmitter Battery Voltage Display
- RF Meter with 2 color LCD Bar Graph LCD Display
- Direct Servo Controller
- Programmable Trainer System Compatible with other Infinity 1000 and 600A Systems
- Programmable Fail Safe (PCM Receivers only)
- Receiver Voltage Display
- Precision Gimbals with Adjustable Length and Tension Sticks
- Built in Transmitter Stand
- Ball Mount Positionable Transmitter Antenna
- Plug-in High Capacity 1100 MAh Transmitter NiCd Battery

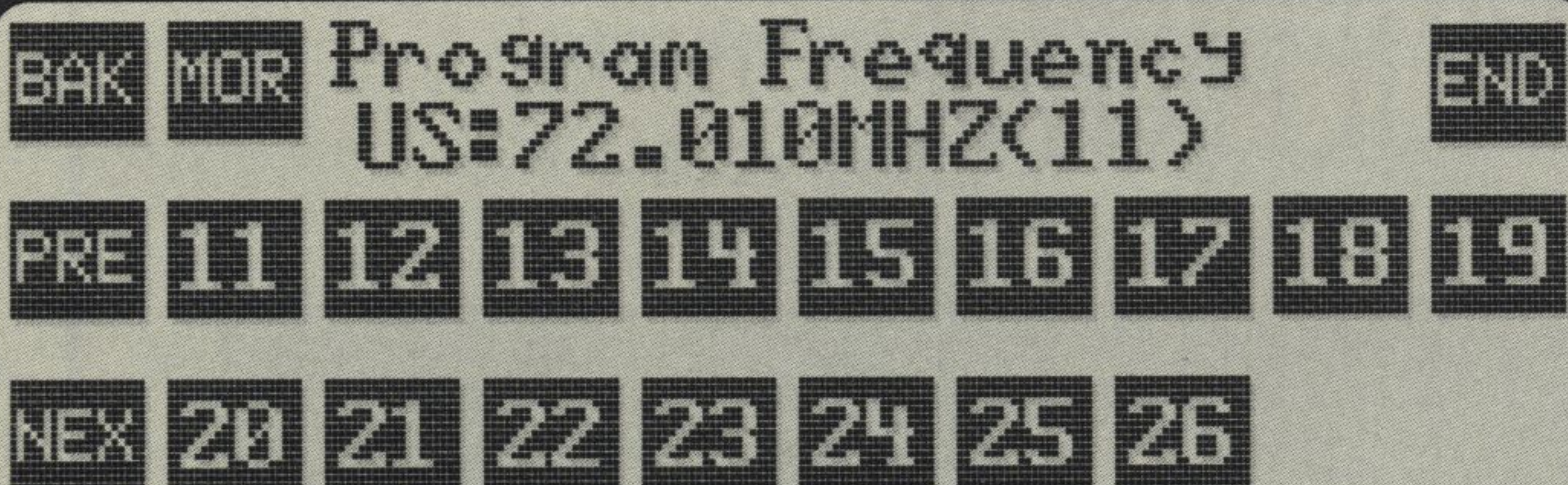


Infinity 1000A Displays





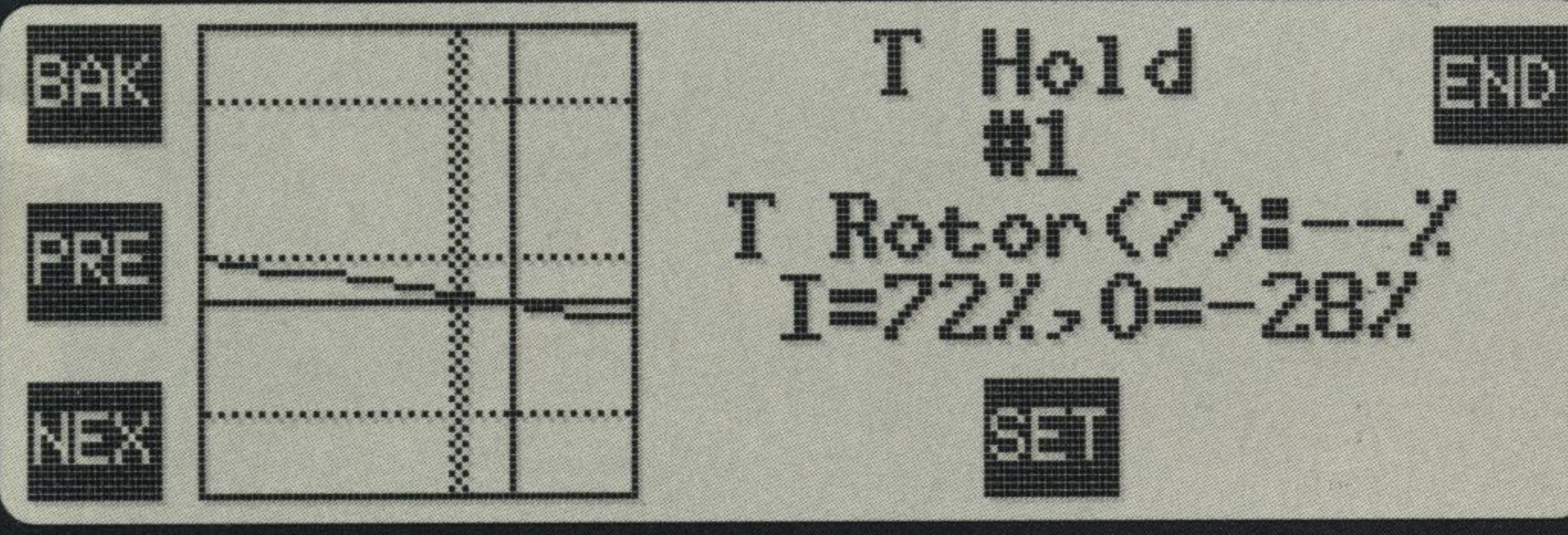
# 1000 SERIES



## Infinity 1000A FOR FIXED-WING & SAILPLANE USE

The Infinity 1000A Is Your Ticket To World Class Performance.

The 10-channel Infinity 1000A includes all the programmable technology the Infinity Series is famous for. You can easily adapt to pattern, scale, jet, sport, electric or competition sailplane flying. It has multiple program mixing capabilities, high resolution 1024 PCM, true narrow band performance and a variety of aircraft templates for every type of fixed wing model.



## Infinity 1000H FOR HELICOPTER FLYERS

The Infinity 1000H Spells Unlimited Flexibility.

With the Infinity 1000H, Helicopter pilots have access to the most advanced helicopter system in the world. It allows precise adjustments and control for aerobatic flying. And for the utmost in versatility, it has high resolution 1024 PCM, 5 ball bearing servos configuration and a large-capacity NiCd battery and true narrow band performance.

### TRANSMITTER SPECIFICATIONS

Transmitter Type	10 Channel Digital Proportional Narrow Band, PLL Frequency Synthesized or Fixed Frequency Type / Dual Stick
Dimensions	L: 8" x W: 2.75" x H: 7.4"
Weight	44 oz.
Power Output	600 MW
Frequencies	72 MHz
Modulation	ATCP/PCM, PPM/FM or PCM/FM Selectable
Power Supply	95018 9.6 Volt, 1100 mAh NiCd
Current Drain	300 mA
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)

The Infinity 1000 is available exclusively from Airtronics. Please contact us for ordering information and pricing.

### INFINITY 1000A FEATURES

All Standard Infinity 1000 Features

- Programmable Flight Modes
- Variable Trace Ratio on Elevator, Aileron, and Rudder with Graphic Display
- 11 Point High/Low Exponential on Aileron, Elevator, and Rudder with Graphic Display
- Dual Rate on Aileron, Elevator and Rudder with Graphic Display
- Optional Automatic Dual Rate
- Optional Triple Rate on Aileron / Elevator / Rudder
- 5 Generic Compensation Mixers
- 3 Generic Bi-Directional Mixers
- 6 Button Activated Roll Programs (Snap or Slow Roll)
- Air Brake System
- Variable Pitch Propeller Mixing System
- Aileron/Rudder Coupling
- Elevator/Flap Mixing
- Flaperon Mixing
- Elevon Mixing
- V-Tail Mixing
- Taileron Mixing
- Spoileron Mixing
- Crow Mixing for Sailplanes
- Landing Threshold Adjustment
- Aileron Differential Adjustment
- 16 Aircraft Templates for Sailplanes and Power Wing Types
- Assignable Receiver Channel Output
- Camber Change Adjustment Capability
- Servo Options for Pattern Scale or Sailplanes
- High Capacity 1000 MAh Receiver NiCd Battery

### INFINITY 1000H FEATURES

All Standard Infinity 1000 Features

- 5 Programmable Flight Modes -Standard / Invert, Throttle Hold, Flight Mode 1, 2, 3
- 11 Point Pitch Curve with Graphic Display for Each Flight Mode
- 11 Point Tail Rotor Pitch Curve with Graphic Display for Each Flight Mode
- 11 Point High/Low Exponential for Fore/Aft Cyclic, L/R Cyclic, and Tail Rotor with Graphic Display
- Variable Trace Ratio on Fore/Aft Cyclic L/R Cyclic, and Tail Rotor with Graphic Display
- Dual Rate on Fore/Aft Cyclic, L/R Cyclic, and Tail Rotor with Graphic Display
- Adjustable Hover Point for each Pitch Curve
- Separate Tail Rotor Offset for each Pitch Curve
- Trim Settings for Each Pitch Curve
- Throttle Hold
- 3 Idle-Ups
- Selection of Rotor Direction
- Acceleration/Revolution Mixing
- Tail Rotor to Throttle Mixing
- Auto Cut Position
- 3 Throttle Stick Switches
- 1 Tail Rotor Stick Switch
- High and Low Pitch Trims
- Hovering Pitch Control
- Standard, CCP3, CCP4 Mixing
- Hover Trim
- Hover Throttle Trim
- 5 Generic Compensation Mixers
- 3 Generic Bi-Directional Mixers

### SYSTEM PACKAGES

All system configurations include Flags, Neck Strap, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90171

Model	IN1000A/141 for Sailplanes
Transmitter Type	IN1000A x 1
Receiver Type	92915 or 92115 x 1
Servos	94141 x 5
Receiver NiCd	95025 x 1
Charger	95034 x 1

#### SYSTEM #: 90172

Model	IN1000A/732 for Pattern / Scale
Transmitter Type	IN1000A x 1
Receiver Type	92915 or 92115 x 1
Servos	94732 x 5
Receiver NiCd	95025 x 1
Charger	95034 x 1

#### SYSTEM #: 90176

Model	IN1000H/735 for Helicopters
Transmitter Type	IN1000H x 1
Receiver Type	92915 or 92115 x 1
Servos	94735 x 5
Receiver NiCd	95025 x 1
Charger	95034 x 1





# INFINITY

## THREE SYSTEMS IN ONE COMPLETE PACKAGE

The Infinity 660 includes all the high-tech performance features that the Infinity lineup is famous for. Best of all, helicopter, airplane and sailplane pilots can all take advantage of the Infinity's awesome performance, since it's programmable for all three types of aircraft.

Like every Infinity, the 660 is incredibly easy to set up, program and use. As easy as it is to use, though, it's also remarkably versatile. Its custom microprocessor and software program allow you to custom tailor the switch assignments to your own needs and easily create exactly the "feel" you want.

The 660 wouldn't be an Infinity if it didn't offer true world-class performance. It features cutting edge computer programming, and is available with an FM narrow band receiver or a PCM quick response receiver that offers super fast servo response time.

The Infinity 660 is the best choice for competitive helicopter, pattern, and sailplane pilots who want world class features and performance at an affordable price.

```
AERO  0:00  0:00
AERO1 10.0V
```



Infinity 660 Displays

```
HELI  0:00  0:00
HELI1 10.0V
```

```
GLID  0:00  0:00
GLID1 10.0V
```

```
D/R  EXP  TRIM-M
S-ROLL WING-TYPE
```

```
MIX (F→E E→F)
C-MIX FLAP-TRIM
```

```
CENTER  M-SELECT
EPA REV SW GEAR
```

```
ALTER TIMER TYPE
D-COPY D-RESET
```

Helicopter

Airplane

Sailplane



# 660 SERIES

MODULATION NAME  
F-SAFE CONTRAST

CLICK (MODE1,2)

## INFINITY 660 SERIES STANDARD FEATURES

- 4-Model Memory
- Servo Centering
- Model Select
- End Point Adjustment
- Servo Reversing
- Switch Assignment
- Alternate Setup
  - Timer
- Data Copy and Reset
- Modulation Select
- Model Naming
- Mode 1 or 2 Select
- Two-Line LCD Display
- Contrast Adjustment
- Adjustable Tension Sticks
- Adjustable Length Sticks
- Plug-In High Capacity NiCd
- Plug-In RF Module
- RF Output Meter
- Built-In Stand
- Trainer System
- Low Voltage Alarm
- Battery Voltage Display



## For Helicopter

### INFINITY 660 FEATURES FOR HELICOPTER USE

- Four 4-Point Pitch Curves
- Throttle Curve Adjustment
- Trim Memory
- Rudder Offset
- Dual Rate
- Exponential
- Hovering Pitch
- Hovering Throttle
- Revolution Mixing
- Throttle Hold
- Compensation Mixing

## For Airplane

### INFINITY 660 FEATURES FOR AIRPLANE USE

- Dual Rate
- Exponential on Aileron, Elevator and Rudder
- Trim Memory
- Four Programmable Snap or Slow Roll Set-Ups
- Spoileron Mixing
- Elevon Mixing
- Aileron Differential Adjustment
- Flap Mixing (Flap, Elevator, Elevator, Flap Mixing)
- Flap Trim
- Compensation Mixing

## For Sailplane

### INFINITY 660 FEATURES FOR SAILPLANE USE

- Dual Rate
- Spoileron (CROW Mixing)
- Flap, Elevator Mixing
- Gear, Elevator Mixing
- Aileron / Rudder Mixing
- Flaperon Mixing
- Aileron Differential
- Trim Memory
- V-Tail Mixing
- Elevator Preset Trim

### SYSTEM PACKAGES

All system configurations include Flags, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90160

Model	IN660/102 For Fixed or Rotary Wing Models
Transmitter Type	IN660 x 1
Receiver Type	92765 FM or 92065 PCM x 1
Servos	94102 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90161

Model	IN660/741 For Fixed or Rotary Wing Models
Transmitter Type	IN660 x 1
Receiver Type	92765 FM or 92065 PCM x 1
Servos	94741 x 5
Receiver NiCd	95025 x 1
Charger	95034 x 1

#### SYSTEM #: 90162

Model	IN660/102 SG-X For Helicopters
Transmitter Type	IN660 x 1
Receiver Type	92765 FM or 92065 PCM x 1
Servos	94102 x 4 (94103 for Gyro x 1)
Receiver NiCd	95025 x 1
Charger	95033 x 1
Special Accessories SG-X Gyro	96253 x 1

#### SYSTEM #: 90163

Model	IN660/141 For Sailplanes
Transmitter Type	IN660 x 1
Receiver Type	92765 FM or 92065 PCM x 1
Servos	94141 x 2
Receiver NiCd	95003 x 1
Charger	95033 x 1

### TRANSMITTER SPECIFICATIONS

Transmitter Type	6 Channel Digital Proportional Narrow Band, Dual Stick
Dimensions	L: 8" x W: 2.75" x H: 7.4"
Weight	40 oz.
Power Output	600 MW
Frequencies	50, 53, and 72 MHz
Modulation	PPM/FM or PCM/FM Selectable
Power Supply	95017 9.6 Volt, 600 mAh NiCd
Current Drain	200 mA
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)



# VISION

## INCREDIBLY QUICK AND EASY PROGRAMMING

It takes hours to program some 8 channel R/C systems. Not the Vision Series. With either the Vision VS8P or VS8SP, you can set up and fine tune flight adjustments in minutes. Both have an Airtronics Advanced Technology Radio Control System (ATRCs), so you can program and store several different set-ups on one transmitter. You can instantly recall, adjust, reset or refine the Vision using precise incremental electronic adjustments. And you do it all with simple "Yes/No" or "Increase/Decrease" commands, which makes the Vision easier to use than most manually adjusted radios. The Vision is a winner of the R/C soaring and pylon world championships.



### TRANSMITTER SPECIFICATIONS

Transmitter Type	Type 8 Channel Digital Proportional Narrow Band / Dual Stick
Dimensions	L: 6" x W: 2.25" x H: 7.06"
Weight	37 oz.
Power Output	600 MW
Frequencies	50, 53, and 72 MHz
Modulation	PPM/FM or PCM/FM Selectable
Power Supply	95014 9.6 Volt, 700 mAh NiCd
Current Drain	300 mA
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)



### VISION SERIES STANDARD FEATURES

- ATRCS Programming System
- 16 Bit Microprocessor for superior computing power
- All Electronic Adjustment that eliminates potentiometers
- Easy-to-read Liquid Crystal Display asks only one programming question at a time to simplify aircraft setup
- Multiple Model Memory stores 8 aircraft in one transmitter
- Non-Volatile Memory Storage eliminates backup batteries
- Aircraft Templates allow different servo configurations for various types of models
- Four-Level Program Access Protection
- User Selectable Mode I, Mode II or Mode III operation
- Electronic Servo Centering on All Channels
- Servo Reversing on All Channels
- PCM or PPM Operation
- Gold Label FM or PCM Super Narrow Band Dual Conversion Receiver
- High Capacity Modular Plug-In Transmitter Battery
- Audio Low Voltage Alarm for Transmitter Battery
- Model Naming Capability
- Compatible with Generic FM Receivers
- Fail Safe Program Capability with PCM Receivers

## Vision VS8P

The Vision VS8P for pattern, scale and sport aircraft enthusiasts.

### VS8P FEATURES

- All Standard Vision features
- User-Assignable Transmitter Switch Functions
- Memory Storage for 8 complete aircraft set ups
- Three In-Flight Selectable Snap Roll options
- Dual Rate on Aileron, Elevator and Rudder, with option for Auto Dual Rate on Rudder
- ATV on Aileron, Elevator, Rudder, Throttle, and Flaps
- Adjustable Throttle Response Curve
- Linear, VTR or Exponential Response on Aileron and Elevator
- Trim Memory on Aileron, Elevator and Rudder
- Generic Compensation Mixing allows two functions to be coupled together (2 mixers available)
- Generic Bi-directional Mixing allows any two functions to be mixed together (2 mixers available)
- Aileron/Rudder Coupling
- Flap/Elevator and Elevator/Flap Mixing
- Cross Trims for Aileron and Elevator

## Vision VS8SP

The Vision VS8SP designed for sailplane flying.

### VS8SP FEATURES

- All Standard Vision features
- Flight Mode Switch with Camber and Elevator Presets for speed, thermal and launch configurations
- Memory Storage for 8 complete aircraft setups
- Dual Rate on Aileron and Elevator
- ATV on Aileron, Elevator, Rudder and Flaps
- Electronic Aileron Differential (2 levels available)
- Aileron/Rudder Coupling (2 levels available)
- Crow Landing Option (flaps down and Ailerons up)
- Elevator/Camber Mixing
- Aileron/Flap Mixing
- V-Tail, Elevon and Flaperon Capability
- Elevator Compensation for Spoilers, Flaps and Landing Gear

### SYSTEM PACKAGES

All system configurations include Flags, Neck Strap, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90100

Model	VS8P/102 for Power
Transmitter Type	VS8Px 1
Receiver Type	92985 PCM or 92785 FM x 1
Servos	94102 x 4
Receiver NiCd	95008 x 1
Charger	95033 x 1

#### SYSTEM #: 90101

Model	VS8P/732 for Pattern/Scale
Transmitter Type	VS8P x 1
Receiver Type	92985 PCM or 92785 FM x 1
Servos	94732 x 4
Receiver NiCd	95008 x 1
Charger	95033 x 1

#### SYSTEM #: 90105

Model	VS8SP/102 for Sailplanes
Transmitter Type	VS8SP x 1
Receiver Type	92985 PCM or 92785 FM x 1
Servos	94102 x 4
Receiver NiCd	95009 x 1
Charger	95033 x 1

#### SYSTEM #: 90108

Model	VS8SP/141 for Sailplanes
Transmitter Type	VS8SP x 1
Receiver Type	92985 PCM or 92785 FM x 1
Servos	94141 x 4
Receiver NiCd	95009 x 1
Charger	95033 x 1



# QUASAR

## PROOF THAT HIGH PERFORMANCE DOESN'T HAVE TO BE HIGH PRICED

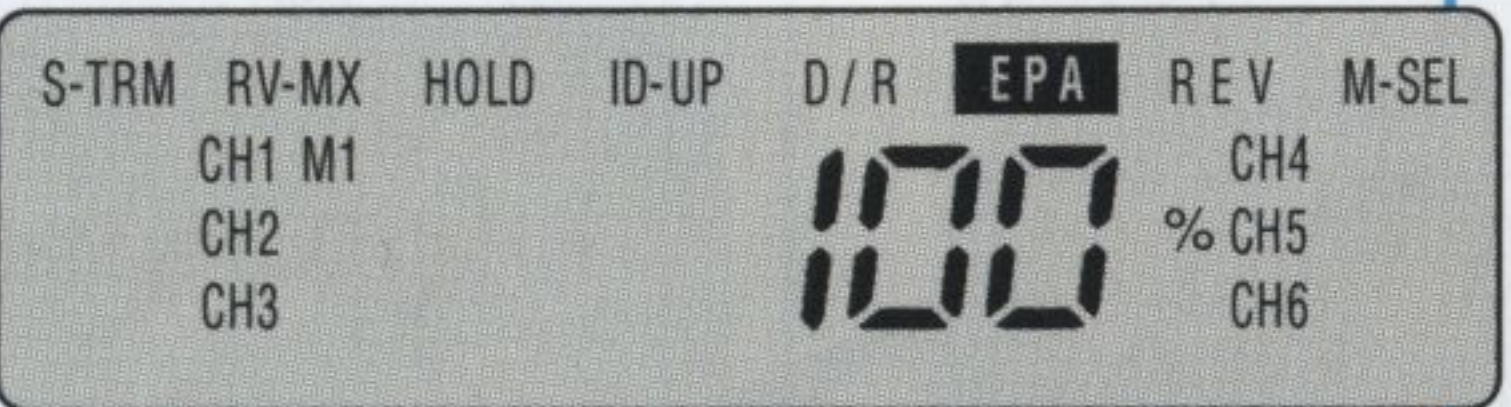
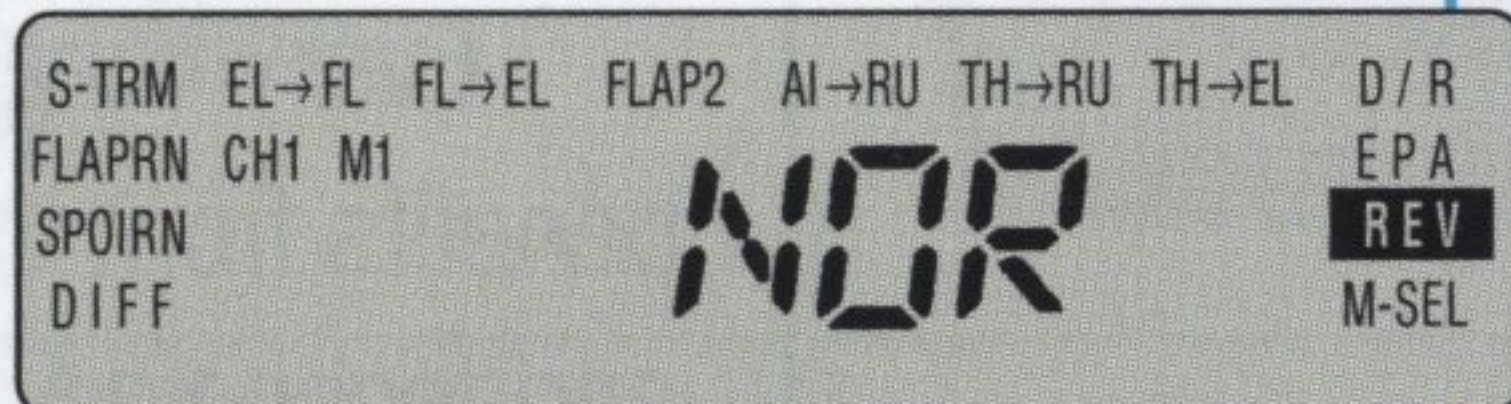
Check out the new Quasar line of 6 channel radio control systems. High performance, ease of use and a price tag that'll put a smile on your face. What more could you ask for?

The Quasars' remarkably easy programming comes from our use of the most sophisticated, user-friendly software available today. With this state-of-the-art computerized technology, you'll spend your time flying — not hassling with any complicated programming or searching because the whole program is always on the LCD screen.

But don't stop there — the Quasar systems

also include a variety of features you've probably come to expect only on far more expensive systems. From 3 model memory to servo reversing and EPA on all channels, the Quasars have all the features you need to help you fly up to your capabilities.

The Quasar QS6A, for fixed wing use, and the QS6H, for helicopters, are both available with high performance servos for a variety of applications. Both models have clear LCD displays and easy-to-understand programming that help you get up and flying quickly and easily.



### TRANSMITTER SPECIFICATIONS

Transmitter Type	6 Channel FM/PPM Dual Stick
Dimensions	L: 7.5" x W: 2.25" x H: 6"
Weight	29 oz.
Power Output	600 MW
Frequencies	50, 53, and 72 MHz
Modulation	PPM/FM
Power Supply	95010 9.6 Volt, 600 mAh NiCd
Current Drain	200 mA
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)



## QS6A Features

- Aileron>Rudder Mixing
- Throttle>Elevator Mixing
- Throttle>Rudder Mixing
- Elevator>Flap Mixing
- Flap>Elevator Mixing
- 2 Stage Flap System
- Flaperon
- Spoileron
- Aileron Differential Adjustment



## QS6H Features

- Idle Up
- Throttle Hold
- Hovering Throttle Adjustment
- Revolution Mixing
- Gyro Select
- Hovering Pitch Adjustment
- 1000 mAh Receiver NiCd

### QUASAR SERIES STANDARD FEATURES

- End Point Adjustments (EPA) on All Channels
- Dual Rate on Aileron and Elevator
- 3 Model Memory
- Sub Trim on All Proportional Channels
- Servo Reversing on All Channels
- Trainer System compatible with Infinity 660
- High Capacity NiCd Batteries
- ESV Meter
- Precision Gimbal Assemblies
- Adjustable Stick Tension and Length
- Narrow Band Dual Conversion FM Receiver

Both systems are available in Mode 2 or Mode 1 on 72, 50, and 53MHz

### SYSTEM PACKAGES

All system configurations include Flags, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90190

Model	QS6A/102 for Power
Transmitter Type	QS6A x 1
Receiver Type	92765 x 1
Servos	94102 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90191

Model	QS6A/322 for Power
Transmitter Type	QS6A x 1
Receiver Type	92765 x 1
Servos	94322 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90195

Model	QS6H/102 for Helicopters
Transmitter Type	QS6H x 1
Receiver Type	92765 x 1
Servos	94102 x 4
Receiver NiCd	95025 x 1
Charger	95033 x 1

#### SYSTEM #: 90196

Model	QS6H/322 for Helicopters
Transmitter Type	QS6H x 1
Receiver Type	92765 x 1
Servos	94322 x 5
Receiver NiCd	95025 x 1
Charger	95033 x 1



# VANGUARD

## FOR VALUE PACKED PERFORMANCE

### Vanguard 4R FM

FOR FIXED WING AND SURFACE USE



There's no better way to get into R/C flying than with the Vanguard VG4R. It's a 4-channel FM model that's perfect for all types of fixed wing aircraft operation and — in its 75 MHz configuration — for surface model applications.

The Vanguard series just may be the greatest value in all of R/C modeling. Combining outstanding performance at an affordable price, Vanguard systems incorporate Airtronics' reliable Gold Label Super Narrow Band Dual Conversion FM and PCM receiver technology. The result is top-flight performance and control for all types of sport and competitive flying, even in today's high-interference environments.

Every Vanguard system benefits from the craftsmanship and technology developed for Airtronics' most advanced models. And with the range of Vanguard systems available today, you're sure to find a model that's right for your individual sport, skill level and budget.

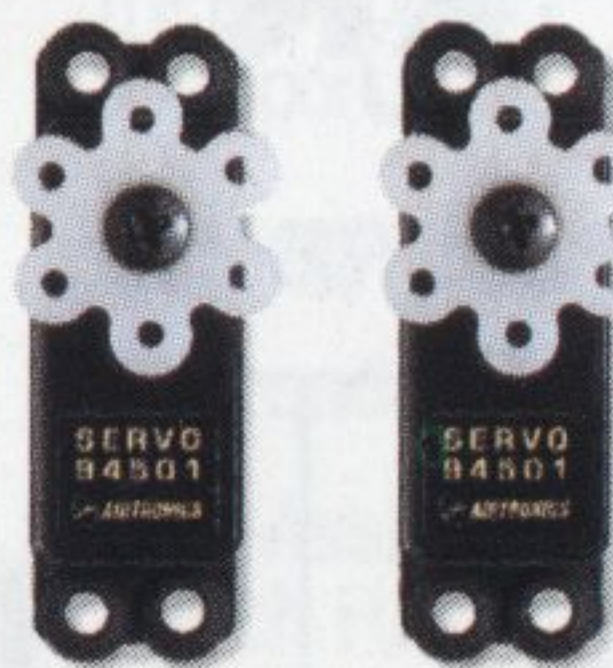
#### VANGUARD SERIES STANDARD FEATURES

- High Quality Rechargeable NiCd Batteries
- Servo Reversing on All Channels
- Dual Conversion Super Narrow Band Receiver
- Adjustable Length and Tension Sticks
- High Quality Precision Gimbals
- Electronic Trims
- Trainer System (FM Only) (VG4R, VG6DR, VG7P FM Only)

#### VANGUARD AIRBORNE SYSTEM FOR SAILPLANES

Includes 2 94501 Microlite Servos, Micro Receiver, and Receiver NiCd Batteries

(For more Vanguard Airborne Systems see System Packages on next page.)



### Vanguard 6DR FM & 6P PCM

ADVANCED FEATURES FOR THE SPORT FLIER

Take a look at the VG6DR and VG6P's list of features and you'll think you're looking at a couple of Airtronics' most sophisticated FM and PCM systems. All Vanguard systems have great features and are value packed making them perfect for beginning and sport fliers.

The reliable VG6DR is also available on 75 MHz for R/C car or boat operation. The VG6P features Airtronics' precision Pulse Code Modulation (PCM) technology for top performance for all sport or competition fliers.



#### VANGUARD 6DR FM & 6P PCM FEATURES

- All Standard Vanguard Series Features
- Dual Rate Elevator and Aileron Controls
- Three-Position Flap Switch
- Landing Gear Switch
- Adjustable Low Throttle Trim (VG6P)
- Flap/Elevator Mixing Functions (VG6P)
- Fail Safe (VG6P)
- PCM/FM or PPM/FM Selectable (VG6P)



# Vanguard 6H FM

## PROVEN PERFORMANCE FOR HELICOPTER PILOTS

Helicopter pilots have never had it so good. The 6 channel Vanguard VG6H FM offers advanced performance at an extraordinary price. The VG6H combines proven FM technology and superior flight performance, usually found only on more expensive R/C systems. These systems are the best and most economical way to enjoy all the benefits of super narrow band helicopter performance.

### VANGUARD 6H FM FEATURES

- All Standard Vanguard Features
- Gyro Sensitivity Switch
- Throttle Hold with Inhibit
- Revolution Mixing
- Idle Up
- High Pitch Trim
- External Pitch Adjustment
- Dual Rate on Elevator and Aileron



# Vanguard 7P FM

## PERFECT CHOICE 7 CHANNEL FOR COMPETITIVE FLIGHT

Competition doesn't have to cost an arm and a leg — and for proof we offer the Vanguard VG7P. It's a 7 channel R/C system with advanced technology and a proven record of reliability. Any way you cut it, that spells value. And with its 7 channel FM design, the VG7P is flexible for all types of R/C modeling excitement.

### VANGUARD 7P FM FEATURES

- All Standard Vanguard FM Features
- Proportional Auxiliary Channel
- Aileron/Rudder Mixing
- Expanded Scale Voltmeter
- Throttle End Point Adjustment
- Three-Position Flap Switch
- Flap/ Elevator Mixing Compensation
- Total Travel Adjustment on Aileron, Elevator and Rudder



### SYSTEM PACKAGES

All system configurations include Flags, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90073

Model	VG6DR/102 for Sport
Transmitter Type	VG6DR x 1
Receiver Type	92765 x 1
Servos	94102 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90070

Model	VG4R/102 for Sport
Transmitter Type	VG4R x 1
Receiver Type	92765 x 1
Servos	94102 x 3
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90074

Model	VG6P/102 for Sport
Transmitter Type	VG6P x 1
Receiver Type	92965 x 1
Servos	94102 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90071

Model	VG4R/831 for Small Aircraft
Transmitter Type	VG4R x 1
Receiver Type	92765 x 1
Servos	94831 x 2
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90076

Model	VG6H/102 for Sport Helicopters
Transmitter Type	VG6H x 1
Receiver Type	92765 x 1
Servos	94102 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

#### SYSTEM #: 90112

Model	VG4R/501 for Sailplanes
Transmitter Type	VG4R x 1
Receiver Type	92745 x 1
Servos	94501 x 2
Receiver NiCd	95002 x 1
Charger	95033 x 1

#### SYSTEM #: 90114

Model	VG6H/407SCG for Electric Helicopters
Transmitter Type	VG6H x 1
Receiver Type	92765 x 1
Servos	94407 x 3
Charger	95033 x 1

Special Accessories  
96254 SG-XM Gyro x 1  
(Includes 94408 Tail Rotor Servo)  
96331 MA-5 Speed Controller x 1

#### SYSTEM #: 90113

Model	VG4R/501SC for Electrics
Transmitter Type	VG4R x 1
Receiver Type	92745 x 1
Servos	94501 x 2
Charger	95033 x 1
Special Accessories	96332 MA-6 Speed Controller x 1

#### SYSTEM #: 90077

Model	VG7P/102 for Sport
Transmitter Type	VG7P x 1
Receiver Type	92775 x 1
Servos	94102 x 4
Receiver NiCd	95004 x 1
Charger	95033 x 1

### TRANSMITTER SPECIFICATIONS

Transmitter Type	4, 6, and 7 Channel FM, 6 Channel PCM/Dual Stick
Dimensions	L:7.5" x W:7.25" x H:2.375"
Weight	31 oz.
Power Output	600 MW
Frequencies	50, 53, 72, and 75 MHz
Modulation	PPM/FM, PCM/FM
Power Supply	95010 9.6 Volt, MAH NiCd
Current Drain	190 mA
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)



# CALIBER

# 3PS

## COMPUTER POWER IN A PISTOL GRIP

This is the one you've heard of – the Caliber 3PS, our latest version of the world championship winning Caliber series, featuring an advanced software system that allows the fastest control response time available in a pistol grip radio.

The high resolution Caliber 3PS FM system offers the ability to program up to three different model settings in the transmitter's memory. And thanks to its advanced micro computer flexibility, the Caliber 3PS lets you set up and fine tune any model for a specific racing track or for different surface conditions in a matter of minutes. Setting up different models is simple as there are no complex menus or codes to follow.

Just wait 'til you experience the comfortable, balanced feel of its pistol grip! The reversible handle easily converts for right or left-handed use, and an optional rubber grip pad (96720) is available for further customization.



### SYSTEM PACKAGES

All system configurations include Flags, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90200

Model	CL3PS/102 (Dry Battery) for Sport
Transmitter Type	CL3PS x 1
Receiver Type	92237 (27 MHz) or 92736 (75MHz) x 1
Servos	94102 x 2

#### SYSTEM #: 90201

Model	CL3PS/144 (Transmitter NiCd) for On-Road
Transmitter Type	CL3PS x 1
Receiver Type	92237 (27 MHz) or 92736 (75MHz) x 1
Servos	94144 x 1
Charger	95033 x 1

#### SYSTEM #: 90202

Model	CL3PS/151 (Transmitter NiCd) for Off-Road
Transmitter Type	CL3PS x 1
Receiver Type	92237 (27 MHz) or 92736 (75 MHz) x 1
Servos	94151 x 1
Charger	95033 x 1

#### SYSTEM #: 90203

Model	CL3PS/152 (Transmitter / Receiver NiCd) for Gas
Transmitter Type	CL3PS x 1
Receiver Type	92237 (27 MHz) or 92736 (75 MHz) x 1
Servos	94152 x 2
Receiver NiCd	95007 x 1
Charger	95033 x 1

### CALIBER 3PS FEATURES

- Super Fast Response 3 Channel FM System
- Large, Easy to use LCD Display
- 3 Model Memory
- One Touch Trim Memory
- Trim Rate Adjustment
- Interchangeable Driving Position for left or right handed use
- Adjustable Rate Control (ARC) for Steering and Throttle allows wide range of control response from mild to quick
- Response Control Switch Allows Selection of mild, quick or normal response control for specific racing conditions
- Steering Variable Dual Rate with Thumb Wheel Adjustment
- End Point Adjustment (EPA) for Steering and Throttle
- Starting Position Switch allows Idle-Up function for engine powered models
- Proportional Auxiliary Channel
- Servo Reversing
- Model Select
- Stop Watch / Lap Timer with Alarm
- Display Switch
- Direct Servo Controller
- Voltage Display
- Low Voltage Alarm
- Wheel Tension Adjustment
- Plug-in R.F.Module
- Command Signal on/off
- Alarm Volume Adjustment
- Key Lock Protection
- Quick Charge Transmitter NiCd Battery (optional)
- NiCd Charging Jack

### TRANSMITTER SPECIFICATIONS

Transmitter Type	3 Channel FM Pistol Grip
Dimensions	L: 8" x W: 3.75" x H: 9.5"
Weight	29 oz. (With Batteries)
Power Output	500 MW
Frequencies	27 and 75 MHz
Modulation	PPM/FM
Power Supply	12.0 Volt AA Dry Cell or optional 95019 9.6 Volt 700 mAh NiCd
Current Drain	225 mA
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)



# RIVAL & RIVAL SPORT

## THE RAGER'S EDGE

If you're a backyard driver or into competition, you'll love the new Rival and Rival Sport. These two Sport Pistol Grip Radio Systems are built to help you own the winner's circle!

Both AM narrow band systems feature an impressive transmitter design and a wide range of innovative features that will leave the competition behind.

For starters, both systems include high performance features, like a completely retractable antenna with a protective cover that encloses the antenna when not in use.



The RV2P has dual rate steering and a low-battery warning system that sounds an alarm when a low-battery condition exists.

But that's not all. The Rival and Rival Sport are custom designed to literally mold to your hand, offering you an incredibly comfortable grip hour after hour. And check out their styling! Their futuristic design lets everybody know you've got the hottest R/C system around.

Best of all, with the Airtronics name behind them, you know you're getting the highest quality design and construction in the industry.

The Rival and Rival Sport are available to operate on 27 or 75 MHz frequencies.

### TRANSMITTER SPECIFICATIONS

Transmitter Type	2 Channel Pistol Grip
Dimensions	L: 6.25" x H: 8.25" x W: 3"
Weight	21 oz. (With Batteries)
Power Output	500 MW
Frequencies	27 and 75 MHz
Modulation	PPM/AM
Power Supply	8 "AA" Size Dry Cells or 9.6 Volt 8 Cell NiCd (Batteries Not Included)
Current Drain	140 MA
Temperature Range	32-110°F
Pulse Width	1.5 MS (Nominal)
Receiver Type	2 Channel Mini BEC AM



### SYSTEM PACKAGES

All system configurations include Flags, Dry Battery Holder, and Mounting Hardware.

#### SYSTEM #: 90135

Model	RV2PS/102
Transmitter Type	RV2PS x 1
Receiver Type	92721 (27MHz) or 92723 (75MHz) x 1
Servos	94102 x 2

#### SYSTEM #: 90136

Model	RV2PS/102
Transmitter Type	RV2PS x 1
Receiver Type	92721 (27MHz) or 92723 (75MHz) x 1
Servos	94102 x 2
Special Accessories	96315 Contender Speed Controller x 1

#### SYSTEM #: 90130

Model	RV2P/102
Transmitter Type	RV2P x 1
Receiver Type	92721 (27MHz) or 92723 (75MHz) x 1
Servos	94102 x 2

#### SYSTEM #: 90131

Model	RV2P/102SC
Transmitter Type	RV2P x 1
Receiver Type	92721 (27MHz) or 92723 (75 MHz) x 1
Servos	94102 x 1
Special Accessories	96315 Contender Speed Controller x 1

### RIVAL SERIES STANDARD FEATURES

- Steering Dual Rate Adjustment (RV2P only)
- Audio Low Power Alarm (RV2P only)
- LED Battery Level Indicators
- Servo Reversing
- Steering Trim Adjustment
- Throttle Trim
- Throttle Trigger Guard
- Antenna Slide Cover
- NiCd Charging Jack
- High Power Output





# CS2P & XL2P

## Pistol Grip Comfort And Control For Car Or Boat Racing Action

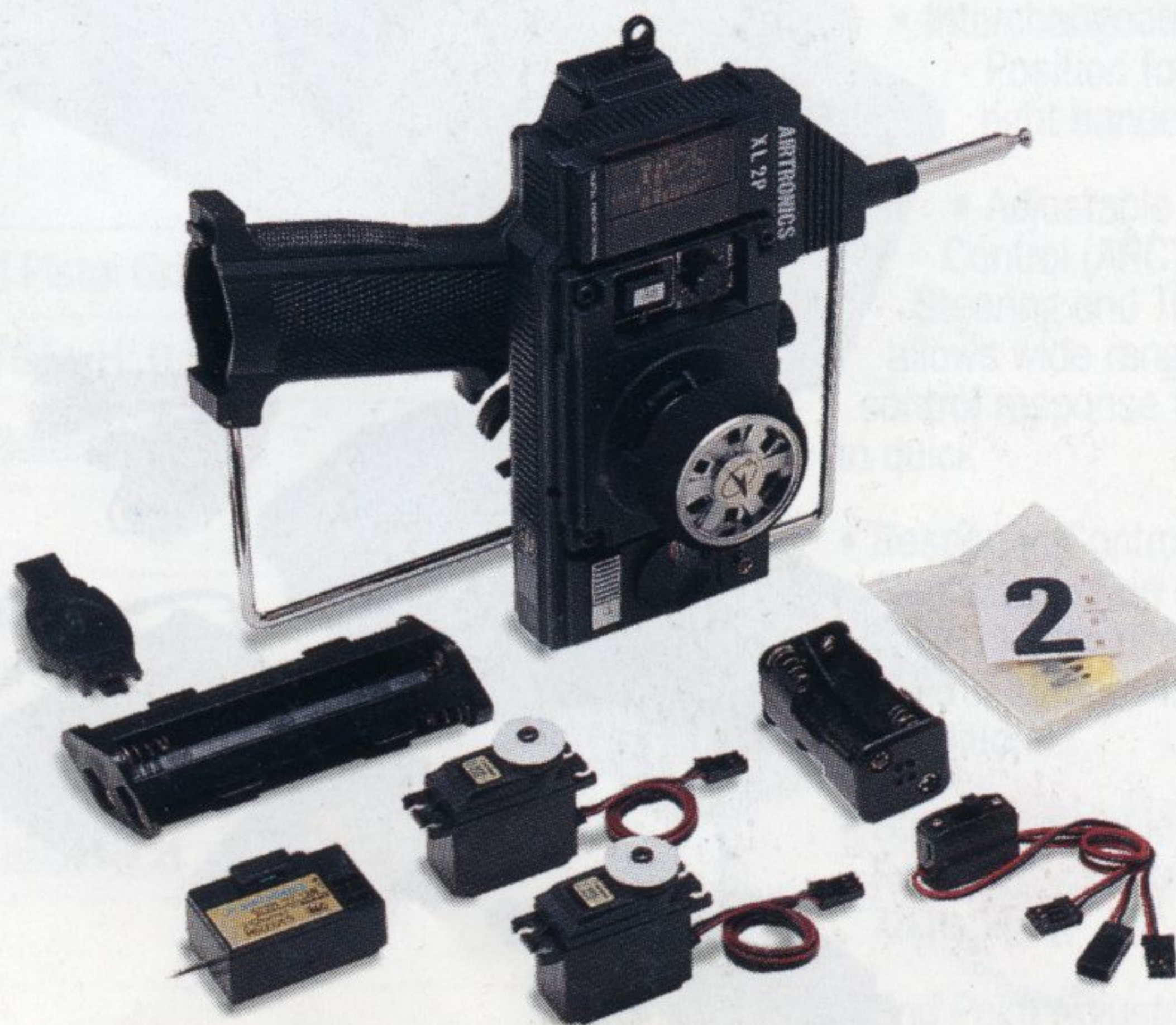
Performance and control are the key words with the Airtronics CS2P and XL2P. For high-powered car or boat racing, the CS2P and XL2P 2 channel, pistol-grip R/C systems ensure first-rate performance and maneuverability no matter what the surface conditions.

Both systems feature sensitive, trigger throttle response, thumb-activated proportional brake control and positive, quick steering response so you're always in complete command. Choose the CS2P for no compromise world class performance. Go for the XL2P for a more economical system that still includes many of the advanced features found in more expensive radios.

Both systems have a well balanced grip which easily reverses for right or left-handed operation.

### CS2P & XL2P SERIES STANDARD FEATURES

- Trigger Operated Throttle
- Thumb Activated Panic Brake Button
- Functional Pistol-Grip Design with Reversible Handle
- High Visibility LED "ON" Indicator
- Servo Reversing
- Posi-Grip Wheel with Adjustable Steering Tension
- Steering Dual Rate Adjustment
- Adjustable Travel Volume on Throttle
- Compact, Lightweight Receiver
- Adjustable Travel Volume on Steering (CS2P)
- Direct Servo Controller (CS2P)
- Throttle Exponential Adjustment (CS2P)
- Steering Exponential Adjustment (CS2P)
- Plug-In Frequency Modules (CS2P)



### SYSTEM PACKAGES

All system configurations include Flags, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90059

Model XL2P/102 for Sport  
 Transmitter Type XL2P x 1  
 Receiver Type 92721 (27 MHz) or 92723 (75 MHz) x 1  
 Servos 94102 x 2

#### SYSTEM #: 90060

Model XL2P/831 for Sport On-Road  
 Transmitter Type XL2P x 1  
 Receiver Type 92721 (27 MHz) or 92723 (75 MHz) x 1  
 Servos 94831 x 2

#### SYSTEM #: 90111

Model XL2P/102SC for Sport (Includes Speed Control)  
 Transmitter Type XL2P x 1  
 Receiver Type 92721 (27 MHz) or 92723 (75 MHz) x 1  
 Servos 94102 x 1  
 Special Accessories 96315 Contender Speed Controller x 1

#### SYSTEM #: 90047

Model CS2P/102 for Sport or Competition  
 Transmitter Type CS2P x 1  
 Receiver Type 92237 (27MHz) or 92236 (75 MHz) x 1  
 Servos 94102 x 2

### TRANSMITTER SPECIFICATIONS

Transmitter Type	2 Channel / Pistol Grip
Dimensions	L: 6.9" x W: 9.5" x H: 5.25"
Weight / CS2P	26.2 oz. (With Batteries)
Weight / XL2P	24 oz. (With Batteries)
Power Output	500 MW
Frequencies	27 and 75 MHz
Modulation	PPM/FM (CS2P) PPM/AM (XL2P)
Power Supply	12 Volt 8 Cell Dry Cell (Batteries Not Included)
Current Drain	150 MA (CS2P) 125 MA (XL2P)
Temperature Range	32-110° F
Pulse Width	1.5 ms (Nominal)



# AVENGER

## TOP QUALITY AND A REASONABLE PRICE FOR SUPER VALUE

There's no better way to get into R/C car or boat modeling than with an Avenger R/C system. Combining high-quality components, top-level craftsmanship and a healthy dose of high-performance features, the Avengers are budget priced, making them a superb all-around value.

Both 2 channel systems feature a functional two-stick design and finely crafted appearance.

### AVENGER 2R & 2S SERIES FEATURES

- Servo Reversing on Both Channels (AV2R)
- Battery Eliminator Receiver Circuitry (B.E.C.)
- Plug-in Crystals
- Easy to use
- Battery Indicator
- NiCd Charge Jack
- Two Single-Axis Stick Assemblies
- Compact, Lightweight Mini-Receiver
- Complete Operational Hardware

### TRANSMITTER SPECIFICATIONS

Transmitter Type	2 Channel/2 Stick
Dimensions	L: 6.5" x W: 2" x H: 7"
Weight	20.5 oz. (With Batteries)
Power Output	450 MW
Frequencies	27 and 75 MHz
Modulation	PPM/AM
Power Supply	8 "AA" Size Dry Cells/ or 9.6 Volt 8 Cell NiCd (Batteries Not Included)
Current Drain	140 MA
Temperature Range	32-110°F
Pulse Width	1.5 ms (Nominal)



### SYSTEM PACKAGES

All system configurations include Flags, Servo Arms, and Mounting Hardware.

#### SYSTEM #: 90120

Model AV2S/102 (Dry Battery)  
 Transmitter Type AV2S x 1  
 Receiver Type 92721 (27 MHz) or 92723 (75 MHz) x 1  
 Servos 94102 x 2

#### SYSTEM #: 90121

Model AV2R/102 (Dry Battery)  
 Transmitter Type AV2R x 1  
 Receiver Type 92721 (27 MHz) or 92723 (75 MHz) x 1  
 Servos 94102 x 2

## Transmitter Carrying Cases

Airtronics carrying cases provide excellent protection for your transmitter and small accessories between flights or races and while traveling. These ruggedly constructed cases feature high quality hardware and metal frames for maximum strength and durability.



96603\*  
Single Transmitter Carrying Case



96606\*  
Deluxe Lightweight Transmitter Carrying Case



96602\* Twin Transmitter Carrying Case



96605  
Deluxe Transmitter Carrying Case for Caliber



96604  
Carrying Case for Infinity

\* 96602, 96603 and 96606 do not hold Infinity or Pistol Grip Systems



# RECEIVERS

Airtronics receivers have established an outstanding reputation through years of competition and extensive field testing. Their innovative design, advanced electronics and high quality construction provide proven reliability and superior performance and noise rejection capability.

In certified independent tests, Airtronics Gold Label Super Narrow Band Dual Conversion FM and PCM Aircraft Receivers have met and actually exceeded all AMA and FCC specifications and guidelines for R/C operation.

Note: All Receivers include Crystals. Please specify frequency when ordering.



### 2 Channel Mini B.E.C. AM

This 2 channel AM Receiver features a built in BEC Battery Eliminator Circuit for use with Electric Powered Car and Boat Models. Small and lightweight, and compatible with all our AM Avenger, Rival, XL2P and Vector Systems.

Part #	Receiver	Dimensions	Weight	Features
92721(27 MHz)	2 Channel	L: 1.88"	0.75 oz. (21g)	Plug-in Crystal
92723 (75 MHz)	Mini B.E.C., AM	W: 1.20" H: 0.76"	Sensitivity 3.0 Microvolts	



### 3 Channel Micro FM

Standard with our CS2P, this 3 channel receiver provides high performance and reliability in a small FM design.

Part #	Receiver
92237(27 MHz)	3 Channel Micro, FM
92236 (75 MHz)	

Dimensions	Sensitivity	Features
L: 1.8" W: 1.125" H: 0.75"	3.0 Microvolts	19" Antenna, Plug-in Crystal



### 3 Channel Micro Narrowband 75 MHz FM

This is the Standard 75 MHz Receiver for our Caliber Series. Advanced circuit design assures high performance and compact size.

Part #	Receiver	Dimensions	Weight	Features
92736	3 Channel Micro Narrowband, 75 MHz FM	L: 1.75" W: 0.79" H: 1.10"	0.88 oz. (25g)	19" Antenna, Plug-in Crystal

### 4 Channel Dual Conversion Micro 72 MHz FM

This small, lightweight 4 Channel Receiver features surface mount technology with crystal and ceramic filters. Perfect for small airplanes, gliders, and electrics, and compatible with all Airtronics FM Transmitters and PCM Transmitters with PPM/PCM Select.

Part #	Receiver	Dimensions	Sensitivity	Features
92745	4 Channel Dual Conversion Super Narrowband, Micro 72 MHz	L: 2.25" W: 0.96" H: 0.82"	1.5 Microvolts	Dual Conversion, Ceramic Crystal Filter, Plug-in Crystal



### 6 or 7 Channel Dual Conversion Super Narrow Band FM

Standard with all our Vanguard, Quasar and Infinity FM Systems, this Receiver is compact and shares the same technology and high quality components as our 8 channel Receivers. Economically priced and compatible with all our FM Transmitters and PCM Transmitters with PPM/PCM Select.

Part #	Receiver	Weight
92765 (72 MHz)	6 or 7 Channel Dual Conversion Super Narrow Band Receiver, FM	1.4 oz. (38g)
92766 (75 MHz)		Sensitivity 1.5 Microvolts
92775 (72 MHz)		Features Dual Conversion Crystal Filter, Plug-in Crystal
92776 (75 MHz)		
92774 (53 MHz)		
92778 (50 MHz)		



### 8 Channel Dual Conversion FM and PCM

These receivers feature a double deck design and end block plugs to minimize size and weight. High quality components and an advanced circuit design make these receiver some of the highest performers available. The FM version is compatible with all our FM Transmitters, while the PCM is for use with Vision, Spectra, and Quantum Systems (Also compatible with Infinity 1000 Systems.)

Part #	Receiver	Dimensions	Weight	Sensitivity
92785 FM (72 MHz)	8 Channel Dual Conversion Super Narrow Band FM	L: 2.4" W: 1.5" H: 0.8"	1.4 oz. (38g)	1.5 Microvolts
92784 FM (53 MHz)				
92788 FM (50 MHz)				
92985 PCM (72 MHz)				
92984 PCM (53 MHz)				
92988 PCM (50 MHz)				

Features Dual Conversion, Ceramic and Crystal Filters, Plug-in Crystal



### 6 Channel PCM Dual Conversion 92065 and 92965

(Same dimensions as 92785) This is the Standard Type PCM Receiver for our Infinity 660 (92065), 600A and Vanguard PCM (92965) Systems (not compatible with Vision, Spectra, Quantum or Infinity 1000 Transmitters.) Features include an end block plug design and low voltage alarm.

Part #	Receiver
92237(27 MHz)	3 Channel Micro, FM
92236 (75 MHz)	

Dimensions	Sensitivity	Features
L: 1.8" W: 1.125" H: 0.75"	3.0 Microvolts	19" Antenna, Plug-in Crystal



### \*10 Channel PCM Dual Conversion

Designed for use with our Infinity 1000, these 10 Channel Receivers share all the features of our 8 channel plus the addition of 1024 Resolution and a direct servo controller port. The 92915 is a fixed crystal receiver, while the 92115 is the PLL Frequency Synthesized version.

Part #	Receiver	Dimensions	Weight	Sensitivity
92915 (72 MHz)	10 Channel Dual Conversion Super Narrow Band, PCM/FM	L: 2.7" x W: 1.5" x H: 0.87"	1.8 oz. (50 g)	1.5 Microvolts

Features Dual Conversion, Ceramic and Crystal Filters, Plug-in Crystal, DSC

Part #	Receiver	Dimensions	Weight	Sensitivity	Features
92115 (72 MHz) (Not pictured)	10 Channel PLL Synthesized, Dual Conversion Super Narrow Band, PCM/FM, ATCP	L: 2.7" x W: 1.5" x H: 1.03"	1.9 oz. (56 g)	1.5 Microvolts	Dual Conversion, PLL Synthesized, Plug-in Crystal, Scanner, Crystal and Ceramic Filters and Hit Counter

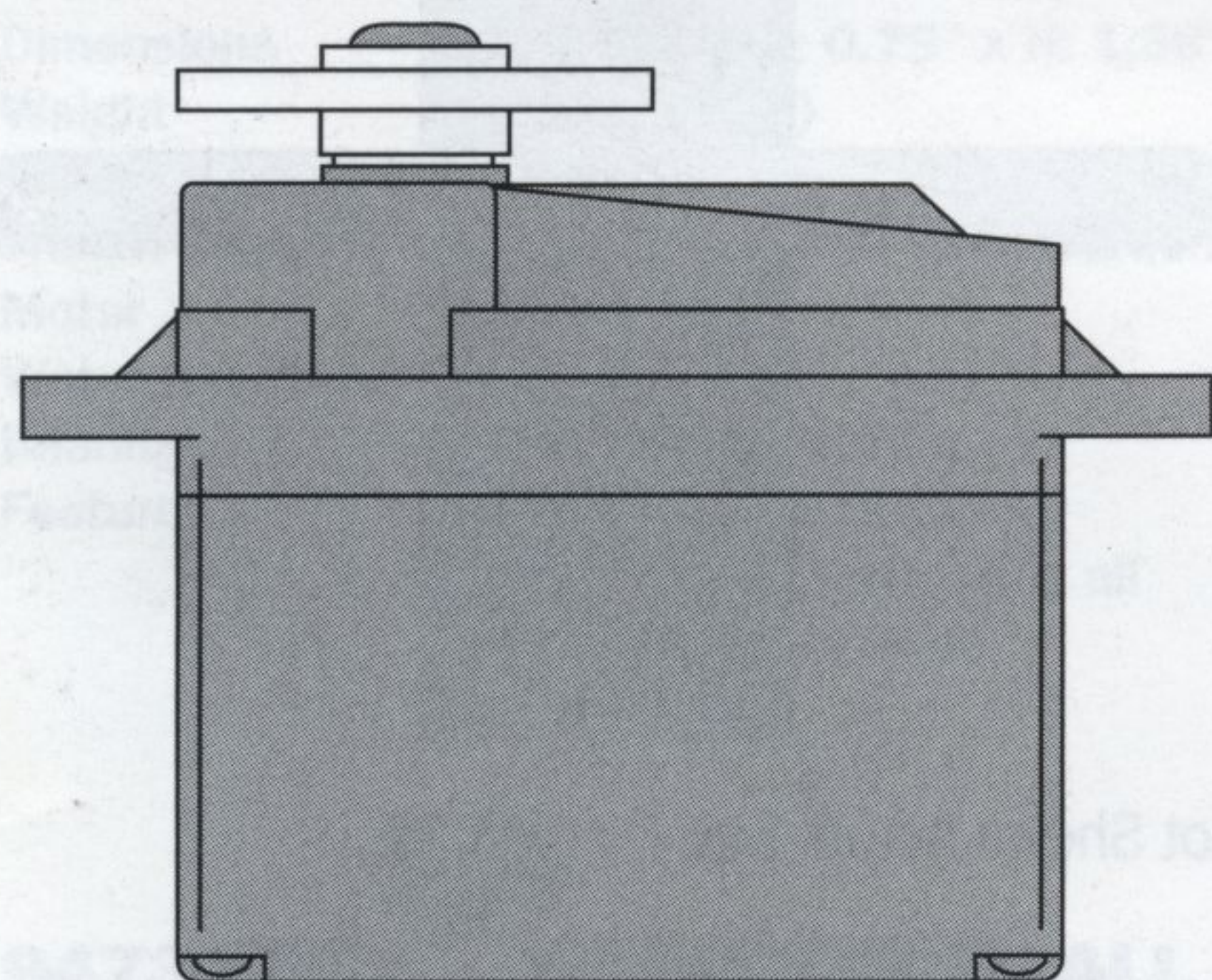
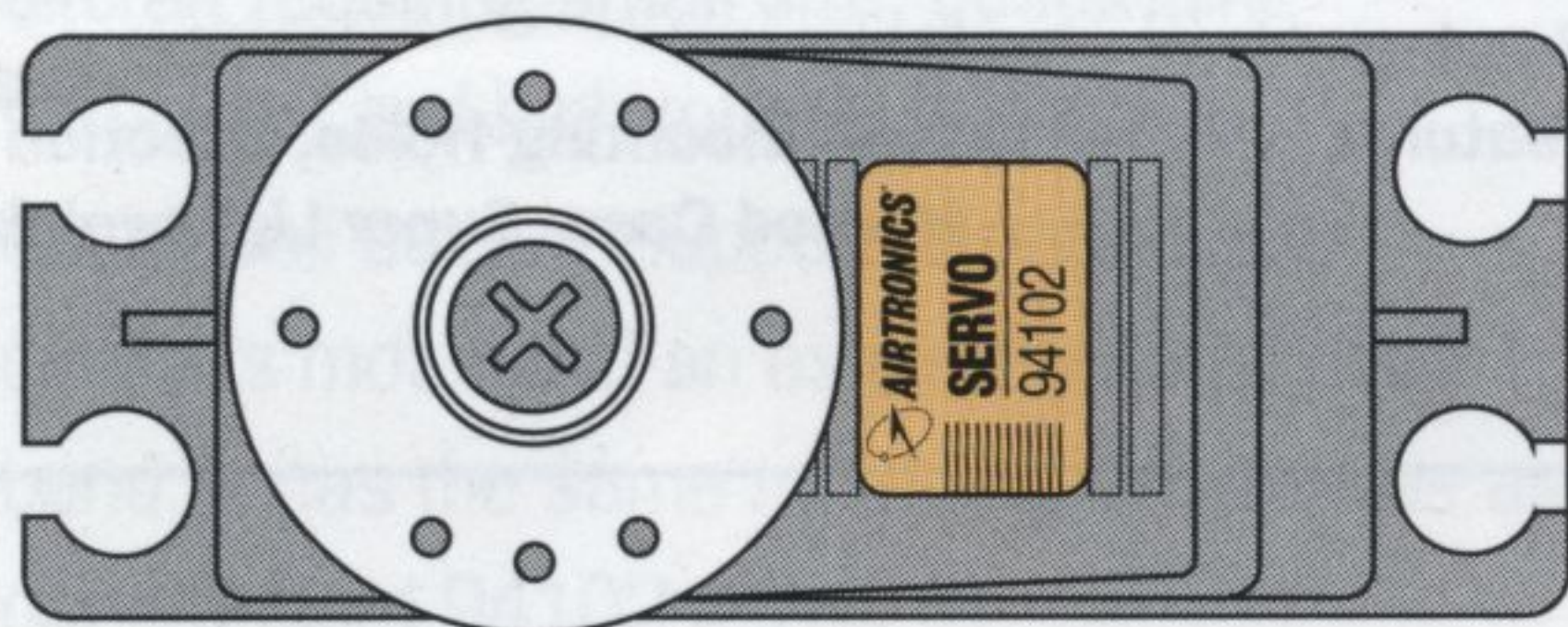
\*Not shown actual size



# SERVOS

Choose from a complete line of top-quality precision servos available for a variety of R/C modeling applications.

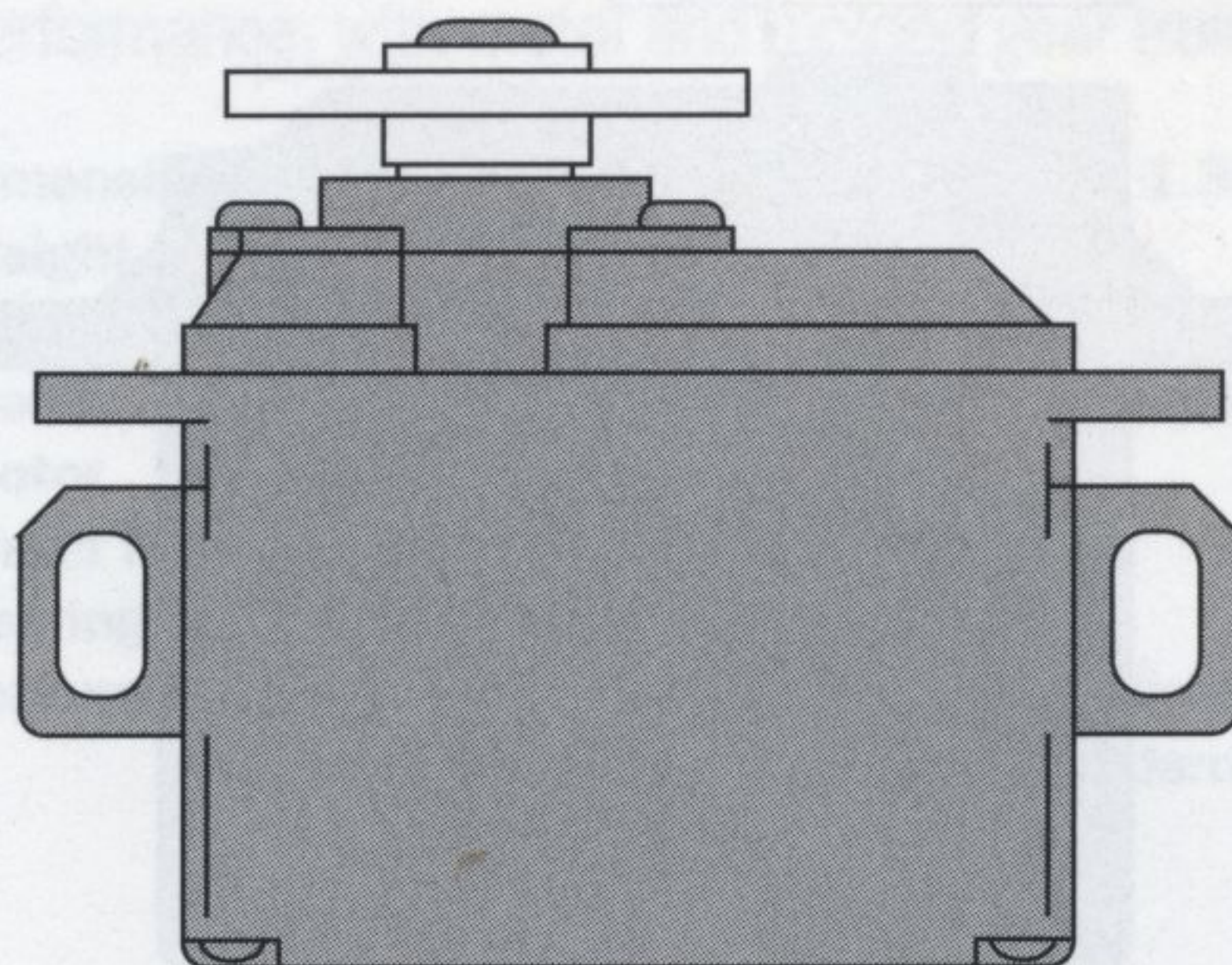
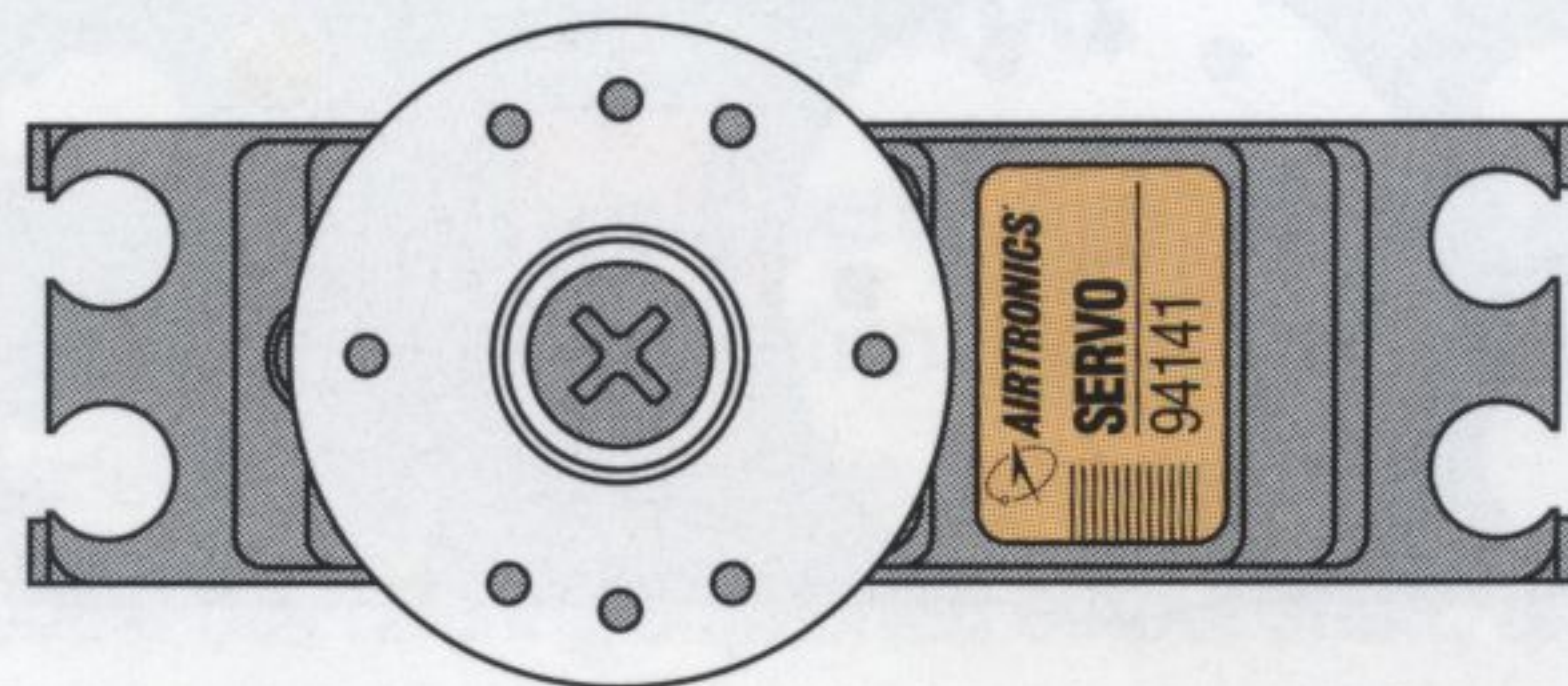
Airtronics servos feature custom I.C.'s, SMT construction, and splined output shafts for easier control surface adjustments. Molded neoprene vibration isolators and injection-molded servo cases ensure superior strength and long lasting durability. All our servos are manufactured with rugged heavy duty gear trains and are fully compatible with all Airtronics AM, FM and PCM systems.



## 94102 (94103) PRECISION HEAVY DUTY STANDARD SERVO

Our Standard Servo, well suited for all types of aircraft, car, and boat models. The 94102 features compact size, rugged gear train, and is compatible with all Airtronics Systems. The 94103 is a component of the SG-X system.

<b>Part #</b>	<b>94102 (94103)</b>
<b>Servo</b>	<b>Precision Heavy Duty Standard</b>
<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.42"</b>
<b>Weight</b>	<b>1.59 oz. (45 g)</b>
<b>Torque</b>	<b>50 oz./in.</b>
<b>Transit Time</b>	<b>0.22 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 3 Pole</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>None</b>
<b>Features</b>	<b>Injection Molded Case, Vibration Isolators, Molded Gear Train uses Standard Servo Arms</b>



## 94141 PRECISION HIGH TORQUE BALL BEARING MICRO SERVO

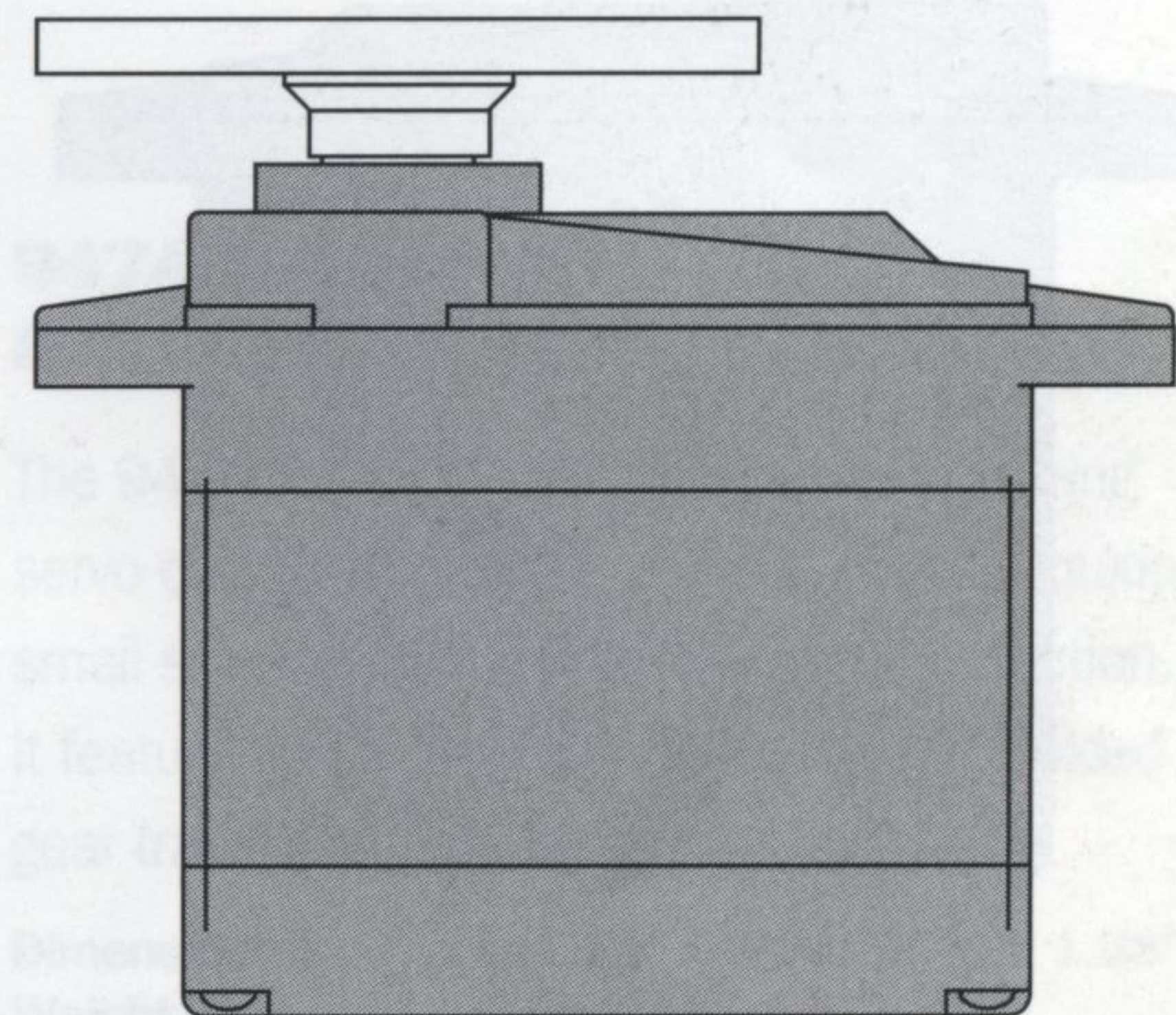
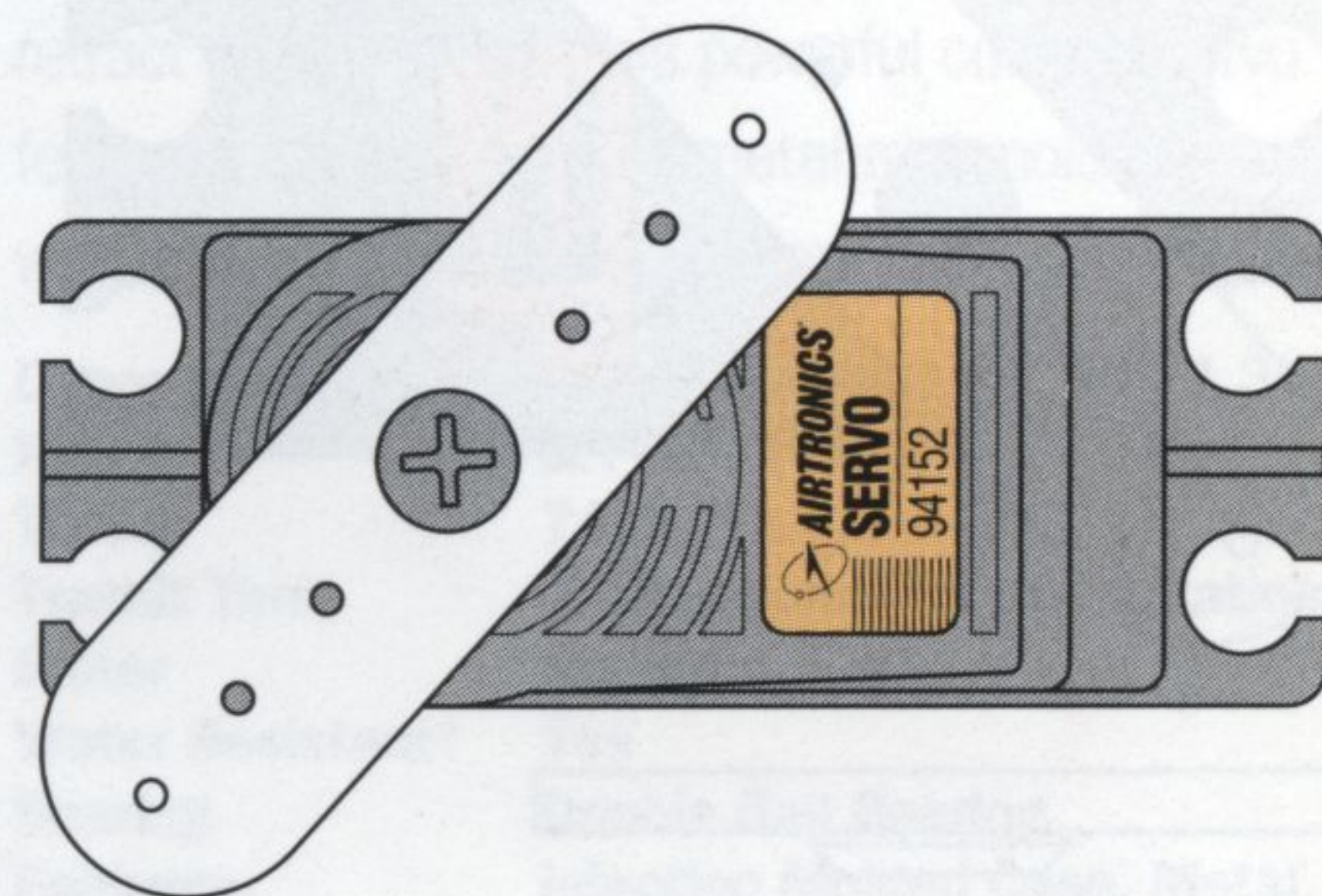
The 94141 servo is used for sailplanes, powered models, Formula 1, Quickie 500, and electric aircraft. It's unique case design make it ideal for horizontal mounting in a sailplane wing. Single ball bearing and metal gear train provide accuracy and ruggedness.

<b>Dimensions</b>	<b>L: 1.42" x W: 0.60" x H: 1.29"</b>
<b>Weight</b>	<b>1.17 oz. (33 g)</b>
<b>Torque</b>	<b>45 oz./in.</b>
<b>Transit Time</b>	<b>0.20 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>Single Ball Bearing</b>
<b>Features</b>	<b>Side Mounts Molded in Case, uses Standard Sized Arms, Metal Gear Train, Metal Output Gear</b>

## 94144 PRECISION HIGH SPEED METAL GEAR BALL BEARING MICRO SERVO

A super fast metal gear train servo with horizontal side mounts molded in the case. Provides maximum performance in 1/10 and 1/12 scale electric powered cars, sailplanes or engine powered aircraft.

<b>Dimensions</b>	<b>L: 1.42" x W: 0.60" x H: 1.29"</b>
<b>Weight</b>	<b>1.17 oz. (33 g)</b>
<b>Torque</b>	<b>33 oz./in.</b>
<b>Transit Time</b>	<b>0.09 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>Single Ball Bearing</b>
<b>Features</b>	<b>Side Mounts Molded in Case, Metal and Molded Gear Train, uses all Standard Sized Arms</b>



## 94151 PRO HIGH SPEED BALL BEARING SERVO

The 94151 is an extremely fast and compact servo with excellent torque suited for 1/10 scale On or Off road applications. It features a double ball bearing supported output gear, powerful coreless motor, and a rugged geartrain.

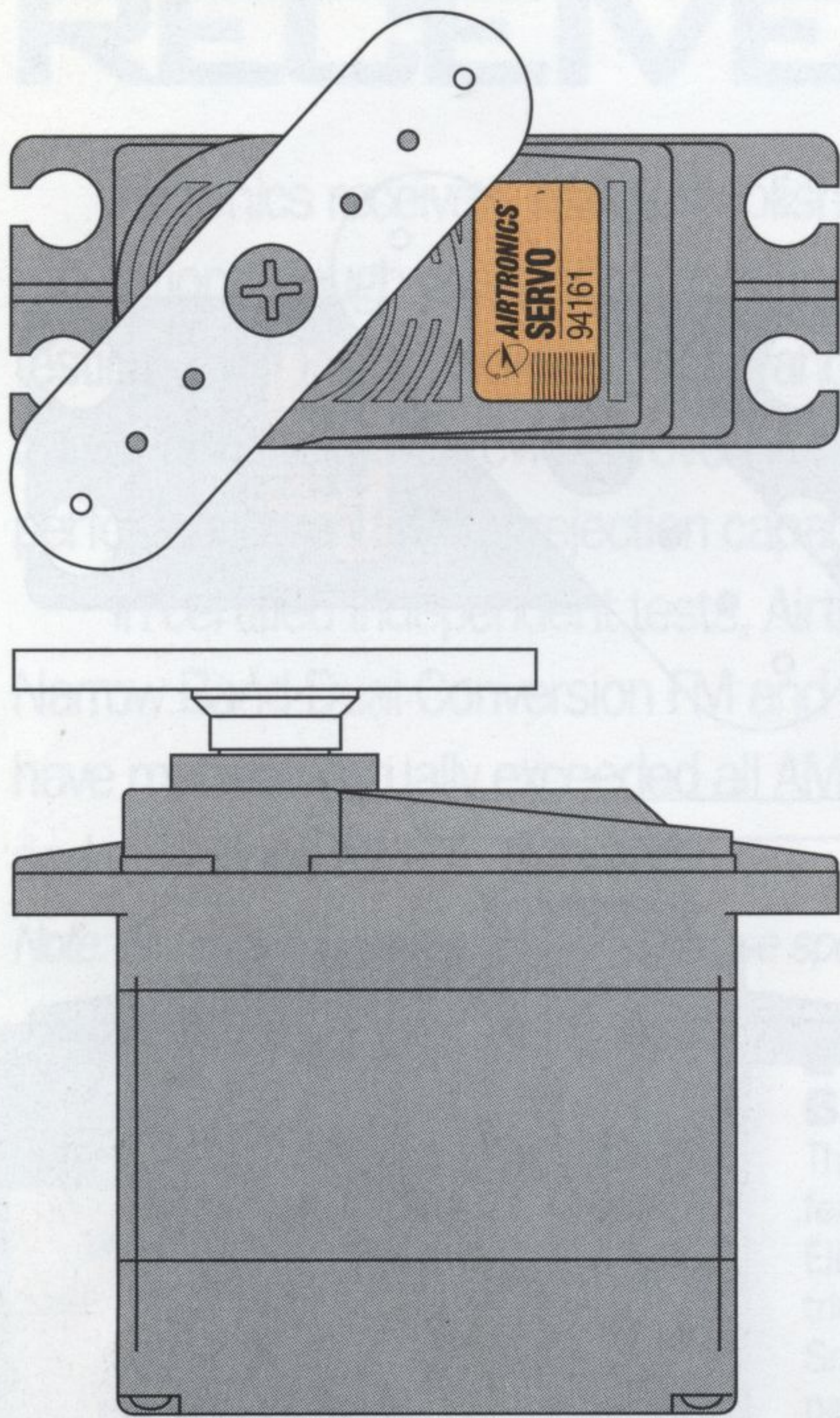
<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.48"</b>
<b>Weight</b>	<b>1.87 oz. (53 g)</b>
<b>Torque</b>	<b>75 oz./in.</b>
<b>Transit Time</b>	<b>0.08 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Metal and Molded Gear Train, uses all Standard Sized Arms</b>

## 94152 PRO HIGH TORQUE BALL BEARING SERVO

Our 94152 high torque car servo is designed for use in R/C monster trucks, 1/8 or 1/4 scale cars as well as unlimited and hydro boats. It features a super powerful coreless motor, double ball bearings, and a metal gear train.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.48"</b>
<b>Weight</b>	<b>2.3 oz. (65 g)</b>
<b>Torque</b>	<b>105 oz./in.</b>
<b>Transit Time</b>	<b>0.12 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Metal Gear Train, uses all Standard Sized Arms, Metal Output Gear</b>

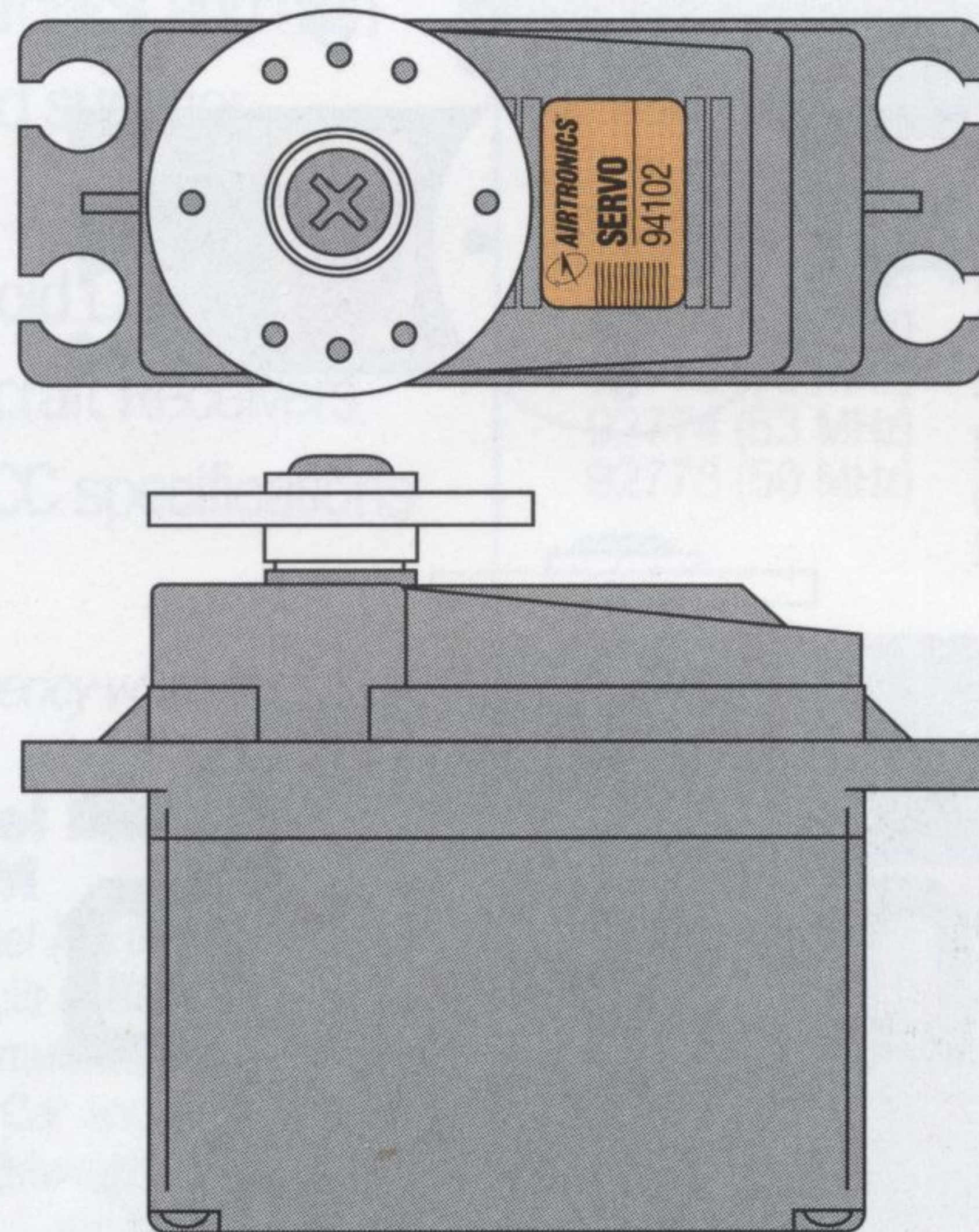




### 94161 PRO LARGE SCALE BALL BEARING SERVO

The 94161 is for applications requiring high torque and a small size. It has the same mounting dimensions as our standard 94102 servo. It is suitable for 1/4 scale and giant scale models. Features are double ball bearings, metal gear train, and a high performance motor.

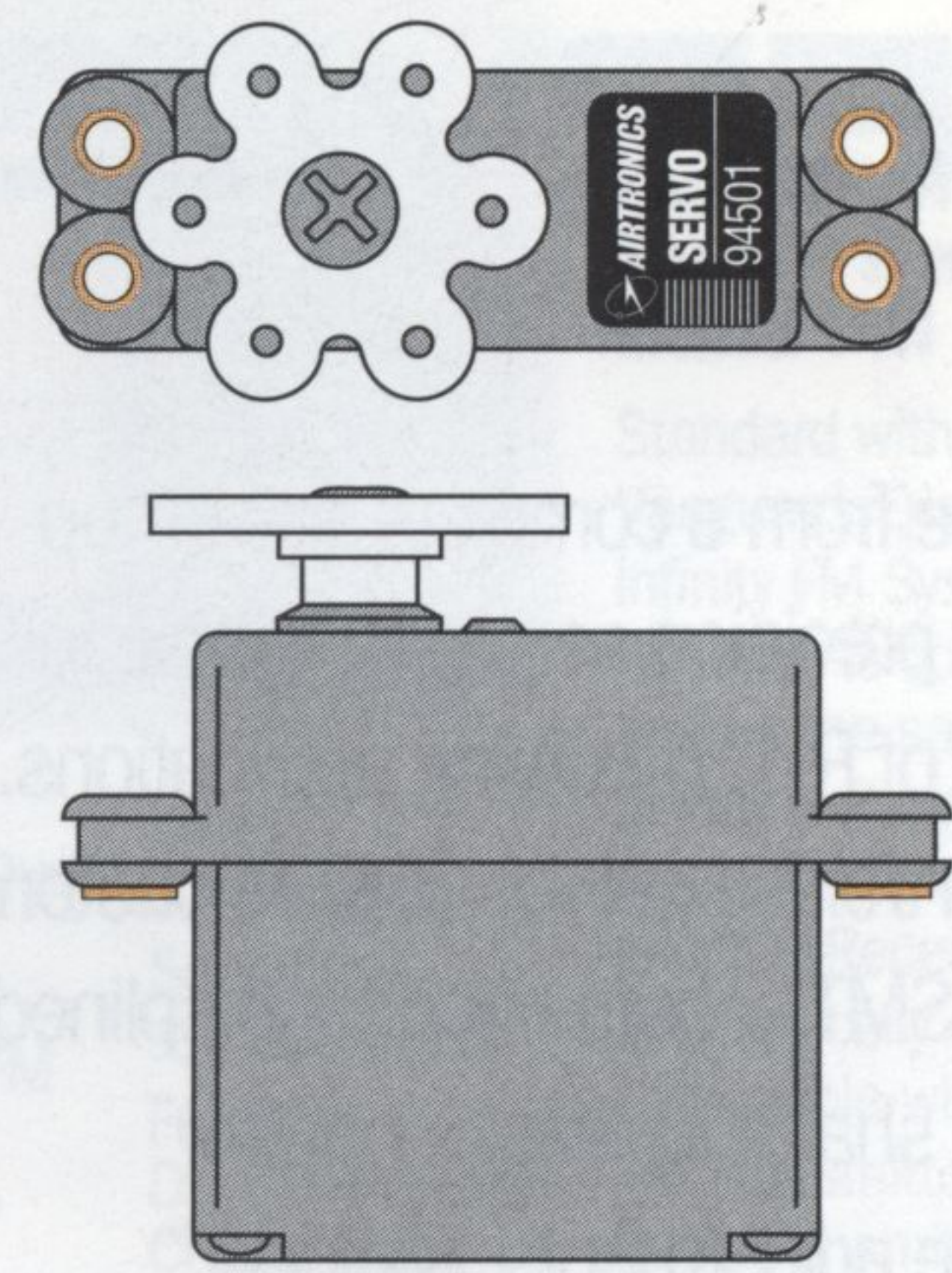
<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.65"</b>
<b>Weight</b>	<b>2.5 oz. (71 g)</b>
<b>Torque</b>	<b>135 oz./In.</b>
<b>Transit Time</b>	<b>0.25 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 3 Pole</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Metal Gear Train, uses all Standard Sized Arms, Metal Output Gear</b>



### 94322 PRECISION HEAVY DUTY BALL BEARING STANDARD SERVO

The 94322 is a ball bearing version of our popular 94102 standard servo. Single ball bearing output shaft and a tough molded gear train make this a good choice for extra durability and precision.

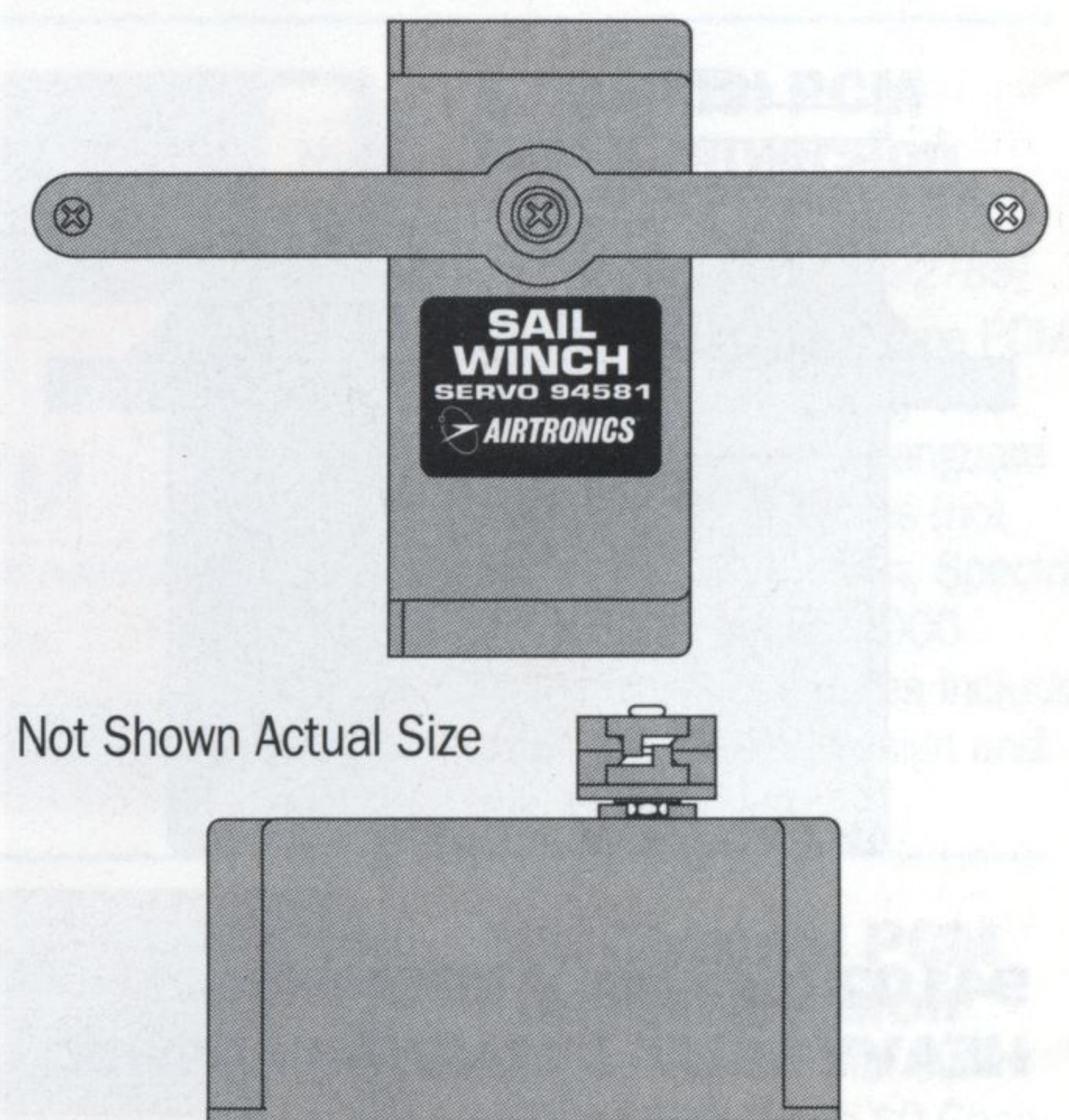
<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.42"</b>
<b>Weight</b>	<b>1.6oz. (48 g)</b>
<b>Torque</b>	<b>50 oz./In.</b>
<b>Transit Time</b>	<b>0.2 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 3 Pole</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>Single Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Vibration Isolators, Molded Gear Train uses Standard Servo Arms</b>



### 94501 MICROLITE SERVO

The 94501 is a lightweight servo recommended for 1/2 A powered models, sailplanes and small electric powered aircraft. It features a coreless motor, low dead band for excellent resolution. Uses micro servo arms.

<b>Dimensions</b>	<b>L: 1.07" x W: 0.50" x H: 1.07"</b>
<b>Weight</b>	<b>0.57 oz. (16 g)</b>
<b>Torque</b>	<b>29 oz./In.</b>
<b>Transit Time</b>	<b>0.23 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>None</b>
<b>Features</b>	<b>Twin Mounting Holes, Injection Molded Case, Super Lightweight</b>

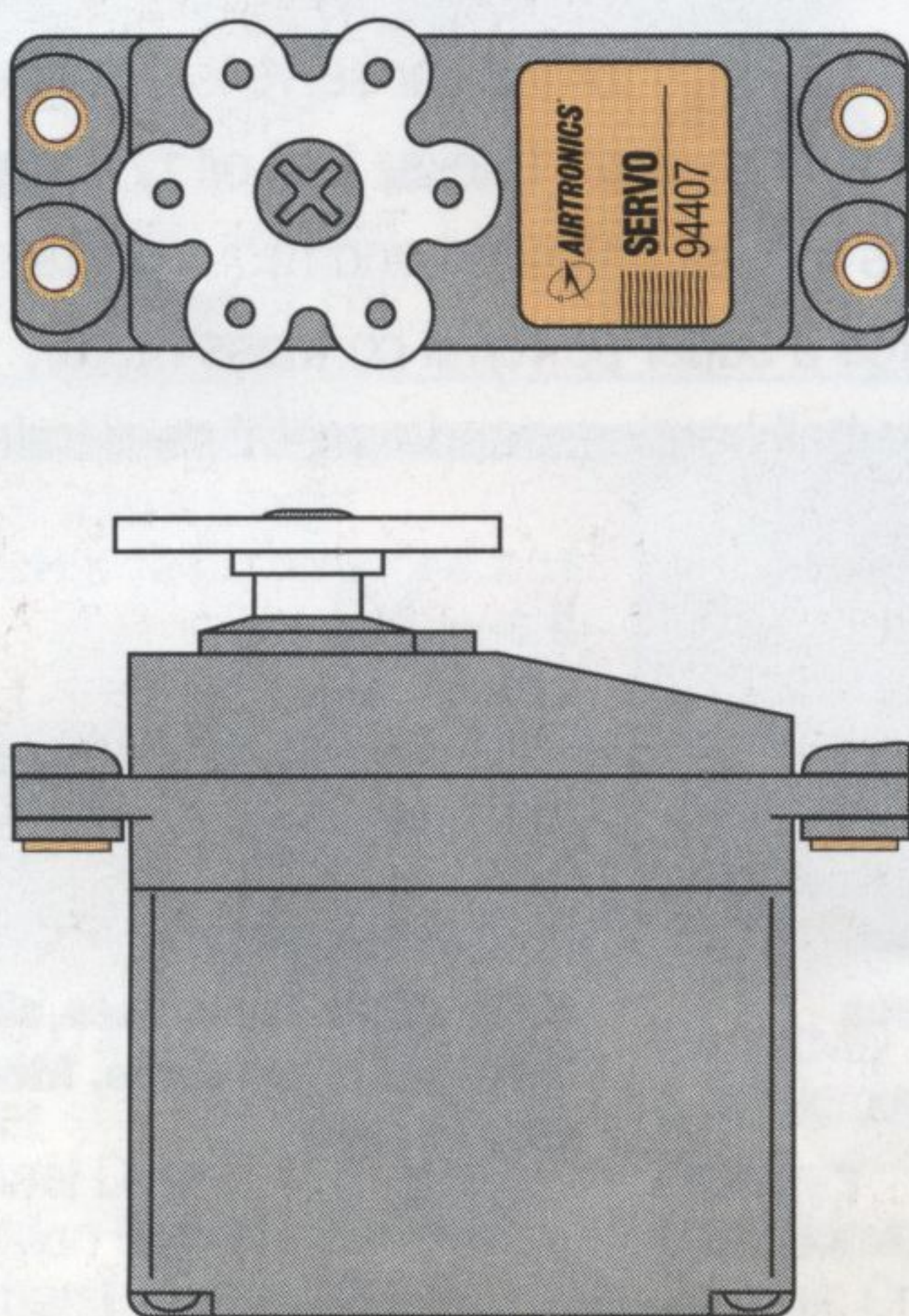


Not Shown Actual Size

### 94581 SAIL WINCH

The 94581 is a high torque, compact sailwinch servo. It features a rugged gear train, dual output arm approximately 5 1/2 inches long supported on a large 23 splined output shaft, that permits easy adjustment of jib and mainsail sheets.

<b>Dimensions</b>	<b>L: 3.65" x W: 1.58" x H: 1.78"</b>
<b>Weight</b>	<b>4.94 oz. (140 g)</b>
<b>Torque</b>	<b>170 oz./In.</b>
<b>Transit Time</b>	<b>5.0 seconds for 170° Rotation</b>
<b>Motor</b>	<b>Standard 3 Pole</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>None</b>
<b>Features</b>	<b>Adjustable Splined Output Shaft, Dual Output Arm</b>

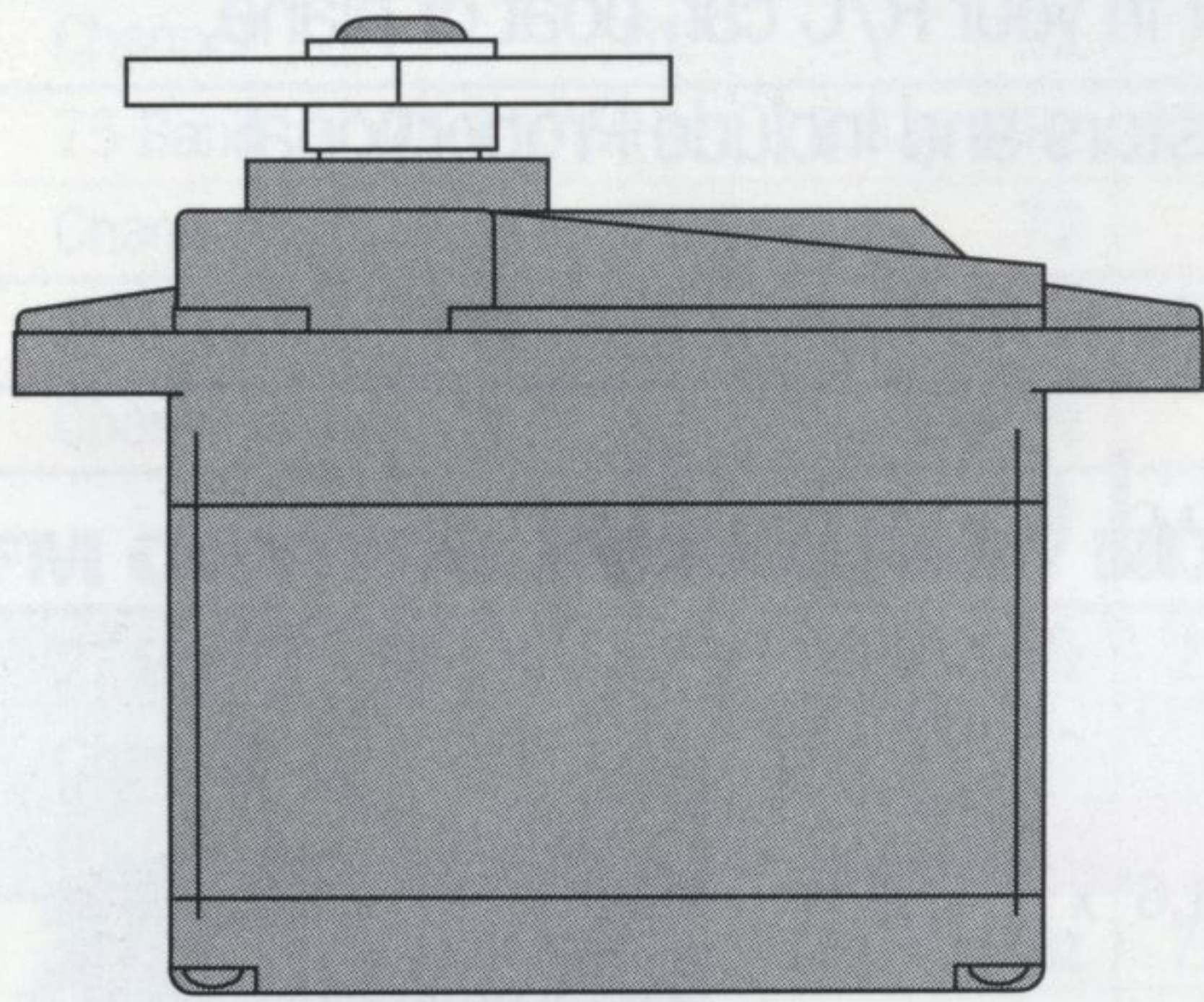
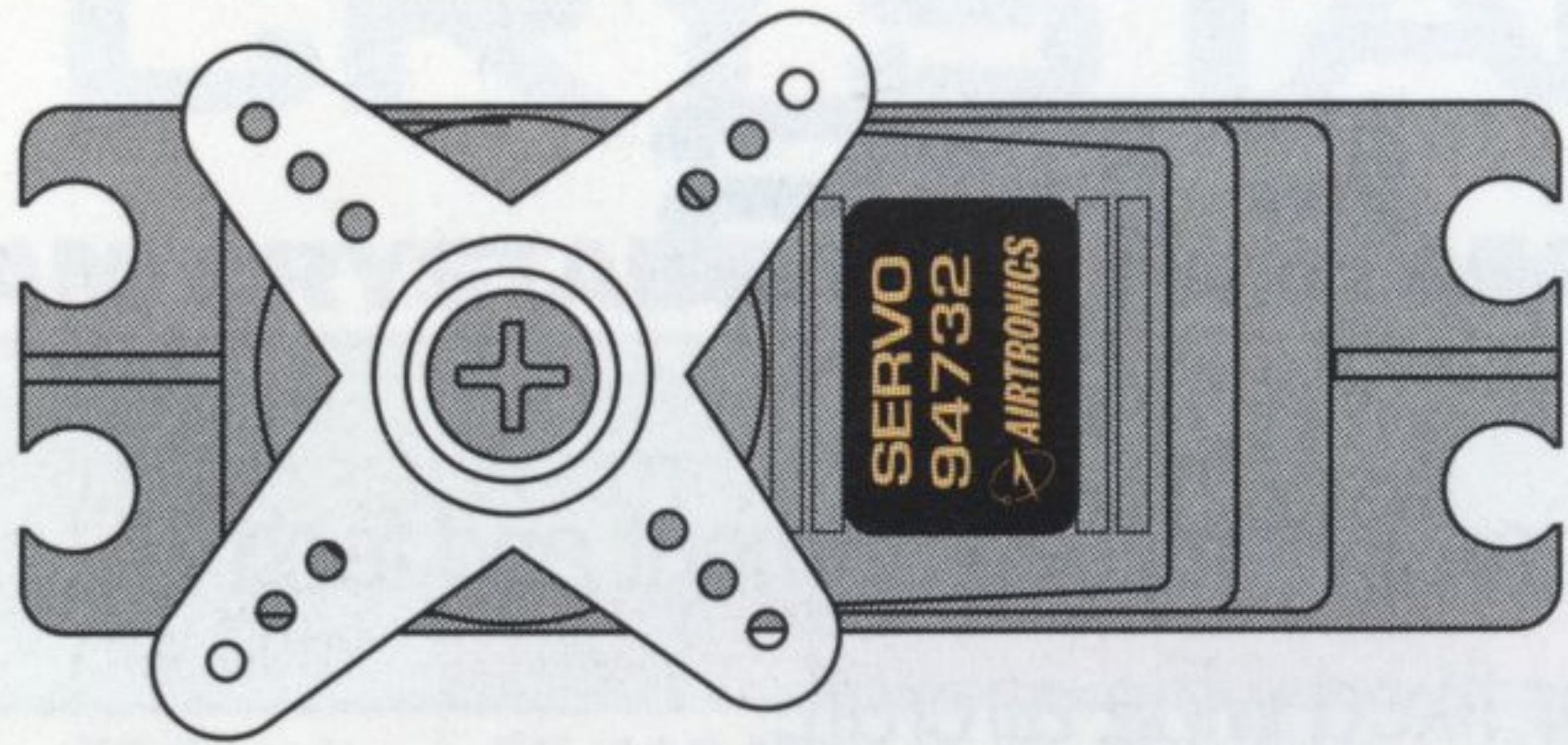


### 94407 (94408) MICRO BALL BEARING SERVO

An excellent choice for installations requiring a servo with good output torque in a small size. It features a metal and molded gear train with a standard 5 pole motor. The 94408 is used with the SG-XM gyro.

<b>Dimensions</b>	<b>L: 1.23" x W: 0.60" x H: 1.23"</b>
<b>Weight</b>	<b>0.96 oz. (27 g)</b>
<b>Torque</b>	<b>29 oz./In.</b>
<b>Transit Time</b>	<b>0.23 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 5 Pole</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>Single Ball Bearing</b>
<b>Features</b>	<b>Metal and Molded Gear Train, uses Micro Sized Arms</b>





### 94732 CONTEST AIRCRAFT BALL BEARING SERVO

A high performance servo designed for pattern type aircraft, 1/4 scale and any fixed wing aircraft requiring small size, outstanding resolution and high torque. It features a doubleball bearing supported output gear, coreless motor and an extremely small dead band. It has the same mounting dimensions as our standard 94102 servo.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.8 oz. (51 g)</b>
<b>Torque</b>	<b>68 oz./In.</b>
<b>Transit Time</b>	<b>0.19 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Molded Gear Train, uses all Standard Sized Arms</b>

### 94734 CONTEST RETRACT BALL BEARING SERVO

A high torque switch type 170° retract servo for fixed wing aircraft or helicopters. It features a special retract arm, a 5 pole motor and uses a rugged metal and molded gear train.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.73 oz. (49 g)</b>
<b>Torque</b>	<b>74 oz./In.</b>
<b>Transit Time</b>	<b>0.40 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 5 Pole</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Molded and Metal Geartrain, uses all Standard Sized Arms and 96319 Retract Arm, 180° Switch Type</b>

### 94735 CONTEST HELICOPTER BALL BEARING SERVO

The 94735 high torque servo is specifically designed with the resolution, speed and power needed for helicopters. The coreless motor, double ball bearing supported output shaft, and narrow dead band provide contest quality performance, with metal and molded gear train.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.8 oz. (51 g)</b>
<b>Torque</b>	<b>75 oz./In.</b>
<b>Transit Time</b>	<b>0.20 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Molded Gear Train, uses all Standard Sized Arms</b>

### 94737 HIGH SPEED BALL BEARING SERVO

Our 94737 is a high speed coreless motor, double ball bearing servo, designed for R/C car and boat operation. It features a molded and metal gear train and uses all standard sized output arms.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.95 oz. (55 g)</b>
<b>Torque</b>	<b>57 oz./In.</b>
<b>Transit Time</b>	<b>0.15 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Molded and Metal Gear Train, uses all Standard Sized Arms</b>

### 94738 HIGH TORQUE BALL BEARING SERVO

The 94738 coreless motor double ball bearing servo provides high torque with excellent resolution. The sturdy injection molded case is sealed with an O-ring to ensure water resistant operation in R/C cars and boats.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.95 oz. (55 g)</b>
<b>Torque</b>	<b>71 oz./In.</b>
<b>Transit Time</b>	<b>0.21 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Coreless</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Metal Gear Train, uses all Standard Sized Arms</b>

### 94739 CONTEST PROPORTIONAL RETRACT BALL BEARING SERVO

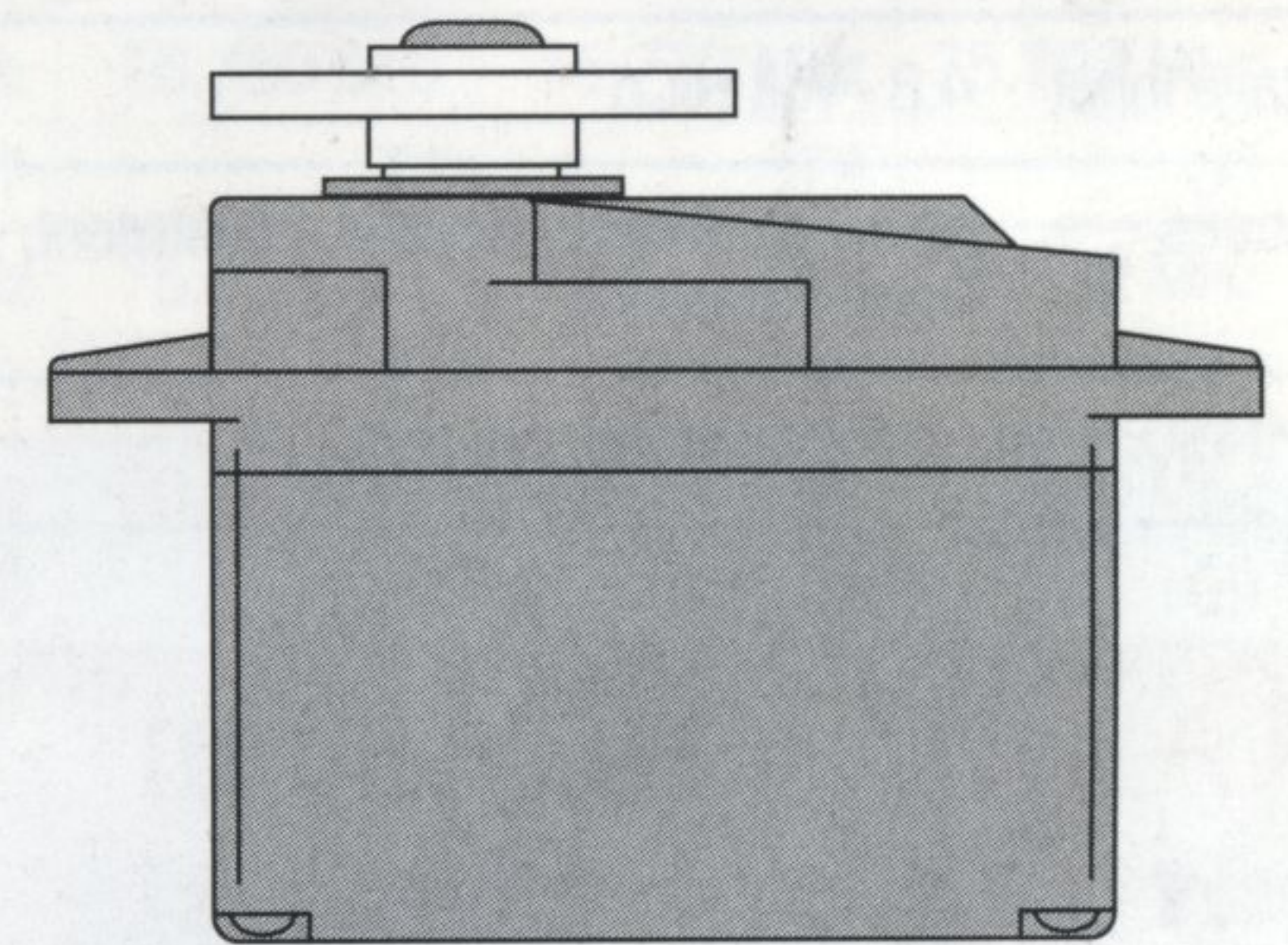
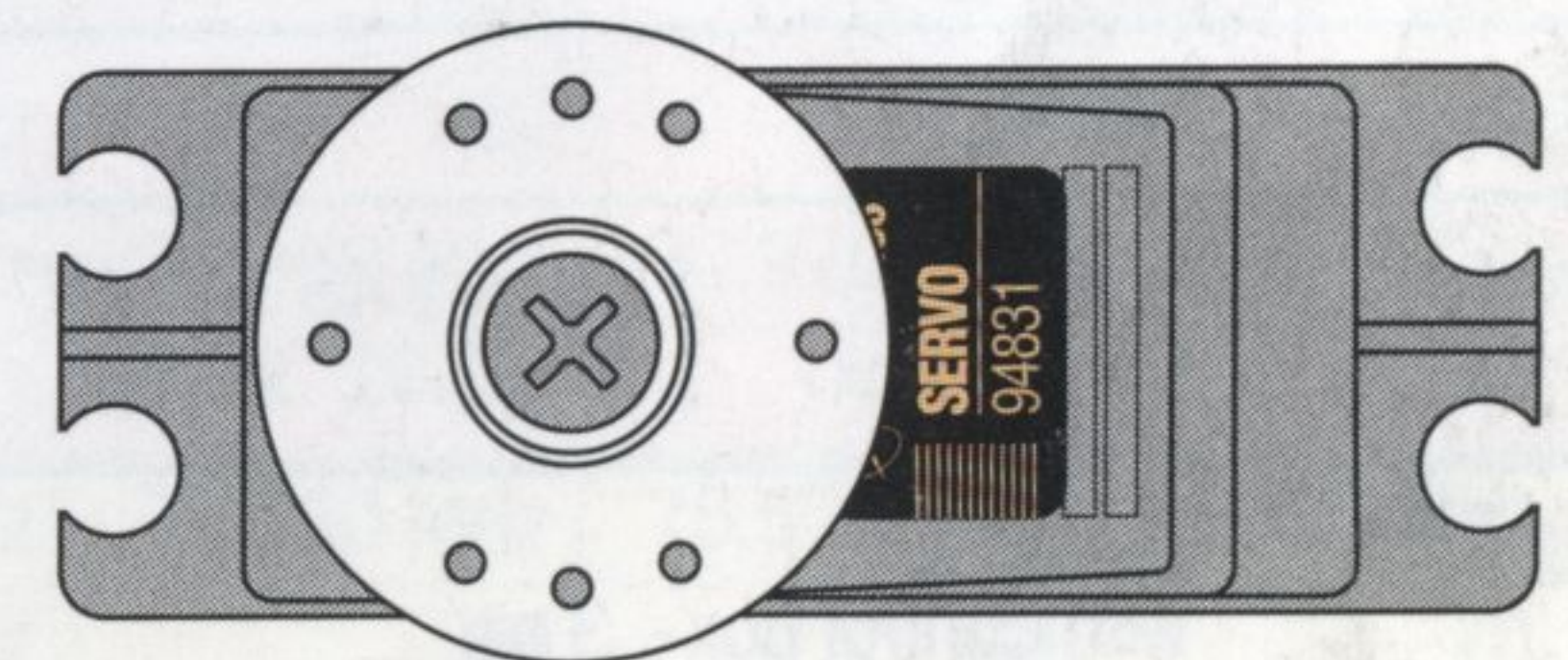
The 94739 is a high torque proportional 170° retract or flap servo. This powerful contest servo features a heavy durable metal and molded gear train with a double ball bearing supported output shaft.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.77 oz. (50 g)</b>
<b>Torque</b>	<b>74 oz./In.</b>
<b>Transit Time</b>	<b>0.42 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 5 pole</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Metal Gear Train, uses all Standard Sized Arms, 170° Travel</b>

### 94741 CONTEST BALL BEARING SERVO

The 94741 contest quality double ball bearing servo can be used for fixed wing aircraft requiring small size, high torque and excellent resolution. It features a 3 pole motor and a rugged molded gear train.

<b>Dimensions</b>	<b>L: 1.54" x W: 0.79" x H: 1.38"</b>
<b>Weight</b>	<b>1.8 oz. (51 g)</b>
<b>Torque</b>	<b>57 oz./In.</b>
<b>Transit Time</b>	<b>0.21 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 3 pole</b>
<b>Water Resistant*</b>	<b>Yes</b>
<b>Bearing</b>	<b>Double Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Metal Gear Train, uses all Standard Sized Arms,</b>



### 94831 MINI BALL BEARING SERVO

The 94831 is recommended for small models and sailplanes requiring a lightweight mini servo. It features a ball bearing, a molded gear train and uses all standard-size output wheels and arms.

<b>Dimensions</b>	<b>L: 1.46" x W: 0.71" x H: 1.18"</b>
<b>Weight</b>	<b>1.1 oz. (31 g)</b>
<b>Torque</b>	<b>38 oz./In.</b>
<b>Transit Time</b>	<b>0.21 seconds for 60° Rotation</b>
<b>Motor</b>	<b>Standard 3 Pole</b>
<b>Water Resistant*</b>	<b>No</b>
<b>Bearing</b>	<b>Single Ball Bearing</b>
<b>Features</b>	<b>Injection Molded Case, Molded Gear Train, uses all Standard Sized Arms</b>

\* Not Water Tight



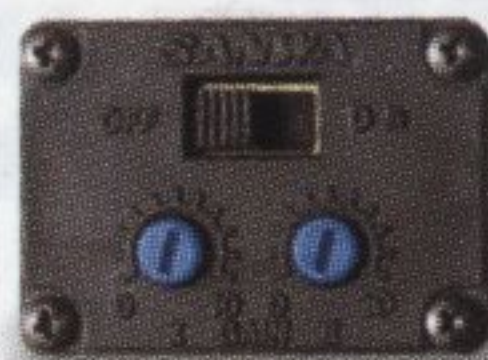
# GYROS & SPEED CONTROLLERS

Airtronics Gyroscope systems contain a special sensitivity circuit designed to automatically sense movement and feed the proper command to the appropriate servo for stable flight operation in either a rotary or fixed wing aircraft.

Our Speed Controllers allow you to proportionally control the speed of an electric motor in your R/C car, boat or plane, without the use of an extra servo. Our solid state speed controllers feature MOS FET transistors and include Proportional Electronic Throttle Control and Battery Voltage Regulation.

## SG-1 Ball Bearing Gyro System

Part #	96252	
Dimensions	Gyroscope -	1.69" x 1.48" x 1.48"
	Mixer Amp -	2.44" x 1.36" x 0.63"
	Control Box -	0.95" x 1.34" x 0.71"
Weight	Gyroscope -	2.54 oz.
	Mixer Amp -	1.09 oz.
	Control Box -	0.72 oz.
Voltage Input	4.8 - 6 Volt NiCd	
Features	Double Ball Bearing, Long Life Motor with Ball Bearing, In-flight On/Off, Dual Gain Adjustments, Neutral Adjust, Servo Reversing	



## SG-X Gyro System\*

(INCLUDES 94103 SERVO)

Part #	96253	
Dimensions	Gyroscope -	1.69" x 1.48" x 1.48"
	Control Box -	1.5" x 0.91" x 0.59"
Weight	Gyroscope with Control Box - 3 oz.	
Voltage Input	4.8 - Volt NiCd	
Features	Gain Adjustment, Neutral Adjustment, Servo Reversing	



## SG-XM Gyro System\*

FOR ELECTRIC HELICOPTERS OR .10 SIZE GLOW (INCLUDES 94408 SERVO)

Part #	96254	
Dimensions	Gyroscope -	1.69" x 1.48" x 1.48"
	Control Box -	1.5" x 0.91" x 0.59"
Weight	Gyroscope with Control Box - 3 oz.	
Voltage Input	4.8 - 6 Volt NiCd	
Features	Servo Reversing, Neutral Adjustment, Gain Adjustment	



\*SG-X and SG-XM Gyros Include an Exclusive Tail Rotor Servo. Other Servos cannot be used.

## Contender Speed Controller

WITH REVERSE

Part #	96315	
Dimensions:	L: 1.8" x W: 1.6" x H: 1.02"	
Weight	1.94 oz.	
Power Supply	7.2 (6 cell) to 8.4 Volt (7 cell) NiCd pack	
Surge Current	480 Amps (Forward) 240 Amps (Reverse)*	
Continuous Current	120 Amps (Forward) 60 Amps (Reverse)*	
On Resistance	0.0075 ohms x 2	
Adjustment Type	Neutral Point, High Point	
Features	Incorporates Heat Sinks, High Power MOS FETS, Heat Protection, Electronic Brake, Servo Mounting Form, High Performance Regulator, Compact On/Off Switch	



\* FET ratings only for comparison, do not exceed 30 Amps (forward) or 10 Amps (reverse)

## MA-5 Speed Controller

FOR ELECTRIC HELICOPTERS

Part #	96331	
Dimensions	L: 1.52" x W: 1.3" x H: 0.69"	
Weight	1.77 oz.	
Power Supply	7.2 to 12 Volt NiCd pack	
Surge Current	900 Amps*	
Continuous Current	220 Amps*	
On Resistance	0.003 ohms	
Adjustment Type	Neutral Point	
Features	High Performance MOS FET, Arming Switch, Heat Protection, Fuse Protection, High Performance Voltage Regulator	



## MA-6 Speed Controller

FOR ELECTRIC AIRCRAFT

Part #	96332	
Dimensions	L: 1.52" x W: 1.3" x H: 0.69"	
Weight	1.7 oz.	
Power Supply	7.2 to 12 Volt NiCd Pack	
Surge Current (FET)	900 Amps*	
Continuous Current	220 Amps*	
On Resistance	0.003 ohms	
Adjustment Type	Neutral Point	
Features	Switch Controlled Brake, High Performance MOS FET, Arming Switch, Heat Protection, High Performance Low Power Cutoff	



\*FET ratings only for comparison. Do not exceed 40 Amps continuous current



# CRYSTALS

Airtronics uses the finest crystals available, cut to exacting tolerances, to assure optimum system performance and reliability in all our radios.

## AM CRYSTAL PAIRS PART NUMBER 93110-XX\*

27 Band	26.995 MHz	27.045 MHz	27.095 MHz	27.145 MHz	27.195 MHz	27.255 MHz				
Channel	1	2	3	4	5	6				
Flag Color										
75 Band	75.410 MHz	75.430 MHz	75.450 MHz	75.470 MHz	75.490 MHz	75.510 MHz	75.530 MHz	75.550 MHz	75.570 MHz	75.590 MHz
Channel	61	62	63	64	65	66	67	68	69	70
75 Band	75.610 MHz	75.630 MHz	75.650 MHz	75.670 MHz	75.690 MHz	75.710 MHz	75.730 MHz	75.750 MHz	75.770 MHz	75.790 MHz
Channel	71	72	73	74	75	76	77 MHz	78	79	80
75 Band	75.810 MHz	75.830 MHz	75.850 MHz	75.870 MHz	75.890 MHz	75.910 MHz	75.930 MHz	75.950 MHz	75.970 MHz	75.990 MHz
Channel	81	82 MHz	83	84	85	86	87	88	89	90

## FM CRYSTAL PAIRS PART NUMBER 93120-XX\*

27 Band	26.995 MHz	27.045 MHz	27.095 MHz	27.145 MHz	27.195 MHz	27.255 MHz				
Channel	1	2	3	4	5	6				
Flag Color										
75 Band	75.410 MHz	75.430 MHz	75.450 MHz	75.470 MHz	75.490 MHz	75.510 MHz	75.530 MHz	75.550 MHz	75.570 MHz	75.590 MHz
Channel	61	62	63	64	65	66	67	68	69	70
75 Band	75.610 MHz	75.630 MHz	75.650 MHz	75.670 MHz	75.690 MHz	75.710 MHz	75.730 MHz	75.750 MHz	75.770 MHz	75.790 MHz
Channel	71	72	73	74	75	76	77	78	79	80
75 Band	75.810 MHz	75.830 MHz	75.850 MHz	75.870 MHz	75.890 MHz	75.910 MHz	75.930 MHz	75.950 MHz	75.970 MHz	75.990 MHz
Channel	81	82	83	84	85	86	87	88	89	90

## DUAL CONVERSION RECEIVER CRYSTALS PART NUMBER 93013-XX\*

72 Band	72.010 MHz	72.030 MHz	72.050 MHz	72.070 MHz	72.090 MHz	72.110 MHz	72.130 MHz	72.150 MHz	72.170 MHz	72.190 MHz
Channel	11	12	13	14	15	16	17	18	19	20
72 Band	72.210 MHz	72.230 MHz	72.250 MHz	72.270 MHz	72.290 MHz	72.310 MHz	72.330 MHz	72.350 MHz	72.370 MHz	72.390 MHz
Channel	21	22	23	24	25	26	27	28	29	30
72 Band	72.410 MHz	72.430 MHz	72.450 MHz	72.470 MHz	72.490 MHz	72.510 MHz	72.530 MHz	72.550 MHz	72.570 MHz	72.590 MHz
Channel	31	32	33	34	35	36	37	38	39	40
72 Band	72.610 MHz	72.630 MHz	72.650 MHz	72.670 MHz	72.690 MHz	72.710 MHz	72.730 MHz	72.750 MHz	72.770 MHz	72.790 MHz
Channel	41	42	43	44	45	46	47	48	49	50
72 Band	72.810 MHz	72.830 MHz	72.850 MHz	72.870 MHz	72.890 MHz	72.910 MHz	72.930 MHz	72.950 MHz	72.970 MHz	72.990 MHz
Channel	51	52	53	54	55	56	57	58	59	60
75 Band	75.410 MHz	75.430 MHz	75.450 MHz	75.470 MHz	75.490 MHz	75.510 MHz	75.530 MHz	75.550 MHz	75.570 MHz	75.590 MHz
Channel	61	62	63	64	65	66	67	68	69	70
75 Band	75.610 MHz	75.630 MHz	75.650 MHz	75.670 MHz	75.690 MHz	75.710 MHz	75.730 MHz	75.750 MHz	75.770 MHz	75.790 MHz
Channel	71	72	73	74	75	76	77	78	79	80
75 Band	75.810 MHz	75.830 MHz	75.850 MHz	75.870 MHz	75.890 MHz	75.910 MHz	75.930 MHz	75.950 MHz	75.970 MHz	75.990 MHz
Channel	81	82	83	84	85	86	87	88	89	90
50 Band	50.800 MHz	50.820 MHz	50.840 MHz	50.860 MHz	50.880 MHz	50.900 MHz	50.920 MHz	50.940 MHz	50.960 MHz	75.980 MHz
Channel	00	01	02	03	04	05	06	07	08	09
53 Band	53.100 MHz	53.200 MHz	53.300 MHz	53.400 MHz	53.500 MHz	53.600 MHz	53.700 MHz	53.800 MHz		
Channel	BB	BR	BO	BY	BG	BX	BV	BZ		
Flag Color										

\*When ordering Crystals, replace -XX with Channel Number, Examples: 93120-70 = FM Crystal Pair, 75.590 93013-55 = Dual Conversion Receiver Crystal, 72.890

# RF MODULES

## SURFACE TRANSMITTER RF MODULES

93727	CS2P Transmitter RF Module	27 MHz FM
93775	CS2P Transmitter RF Module	75 MHz FM
93827	CALIBER 3P Transmitter RF Module	27 MHz FM
93875	CALIBER 3P Transmitter RF Module	75 MHz FM

## AIRCRAFT TRANSMITTER RF MODULES\*

93782	VISION / INFINITY 660 Transmitter RF Module	72 MHz FM
93850	VISION / INFINITY 660 Transmitter RF Module	75 MHz FM
93853	VISION / INFINITY 660 Transmitter RF Module	27 MHz FM

\*Also compatible with Module, Spectra and Quantum Radios





# BATTERIES & CHARGERS

Airtronics complete line of high quality, long life battery packs offer superior reliability and are fully compatible with all Airtronics radio systems.

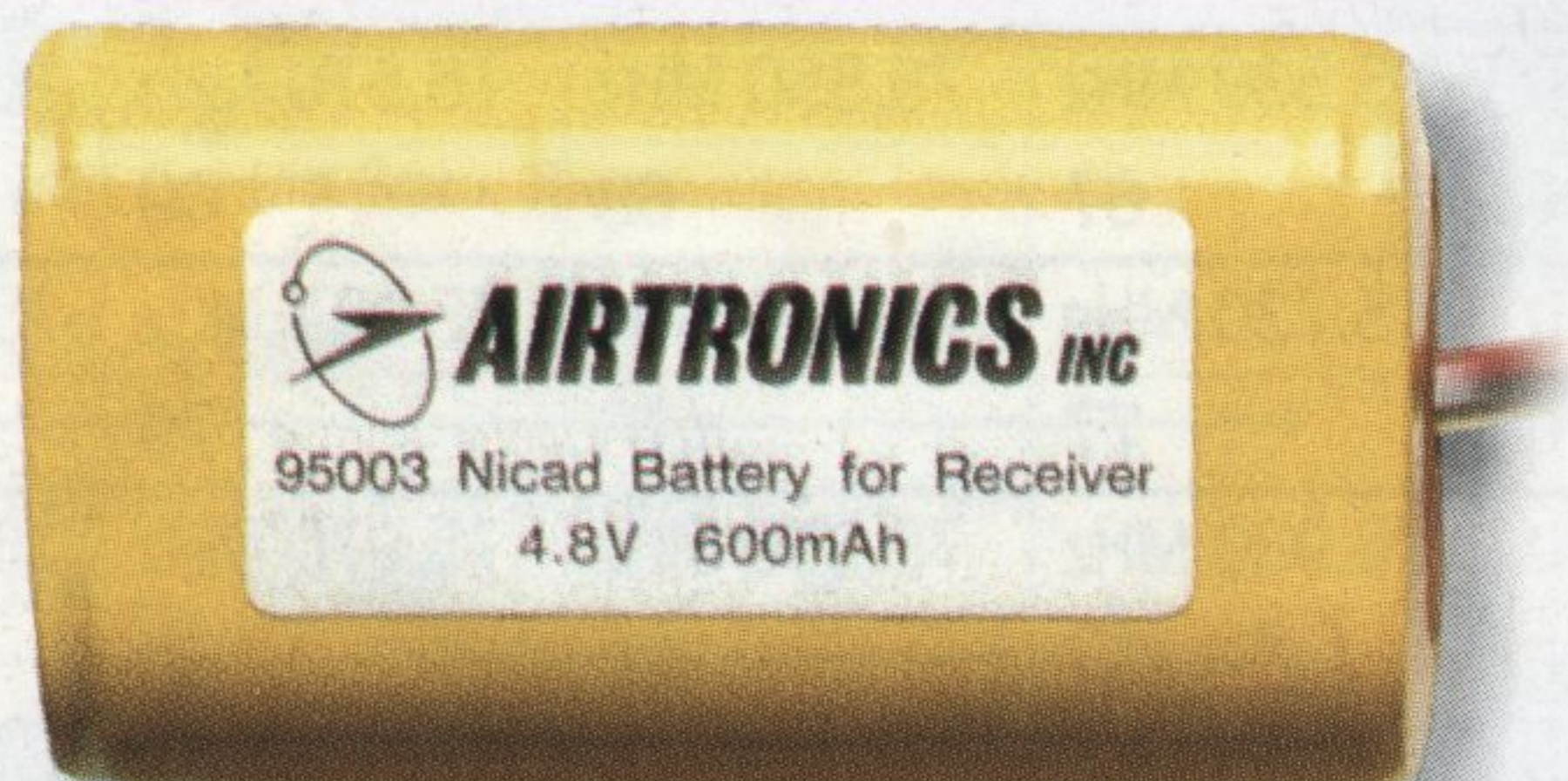
## RECEIVER NICD BATTERIES AND DRY BATTERY HOLDERS



95001 Receiver NiCd Battery (Square) 4.8V 100mAh



95002 Receiver NiCd Battery (Flat) 4.8V 270mAh



95003 Receiver NiCd Battery (Square) 4.8V 600mAh

95004 Receiver NiCd Battery (Flat) 4.8V 600mAh



95005 Receiver NiCd Battery (Flat) 4.8V 1200mAh



95006 Receiver NiCd Battery (Flat) 4.8V 450mAh



95007 Receiver NiCd Battery (Flat) 6.0V 450mAh



95008 Receiver NiCd Battery (Flat) 4.8V 700mAh

95009 Receiver NiCd Battery (Square) 4.8V 700mAh



95025 Receiver NiCd Battery (Flat) 4.8V 1000mAh



95026 Receiver NiCd Battery (Flat) 4.8V 2000mAh



95040 Receiver 4 Cell Dry Battery Holder

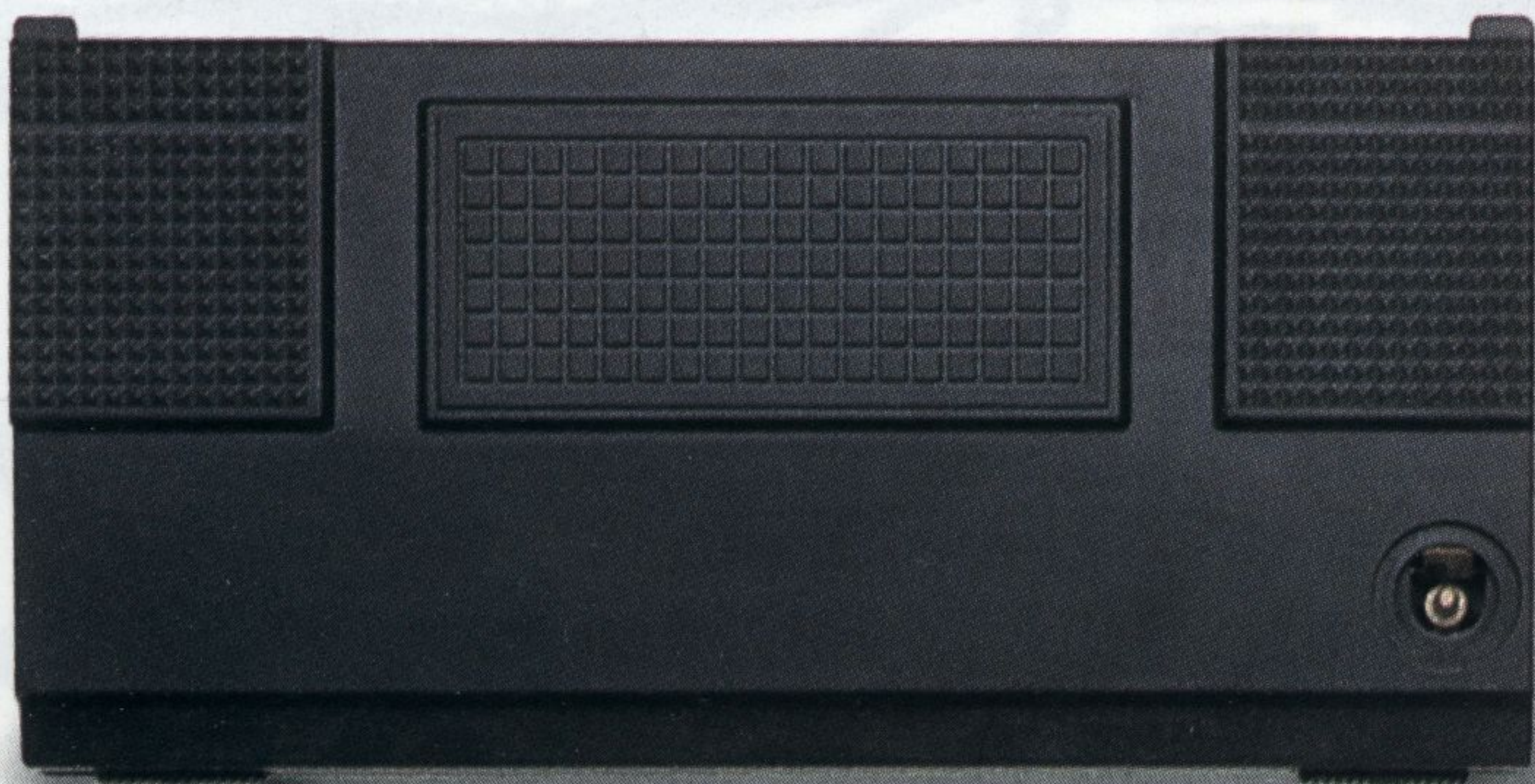
95043 Receiver 4 Cell Dry Battery Holder with B.E.C. Plug

**TRANSMITTER NICD BATTERIES AND DRY BATTERY HOLDERS**



95010 Transmitter NiCd Battery for VANGUARD / QUASAR 9.6V 600mAh

95011 Transmitter NiCd Battery for XL2P/CS2P 9.6V 500mAh



95014 Transmitter NiCd Battery for VISION 9.6V 700mAh



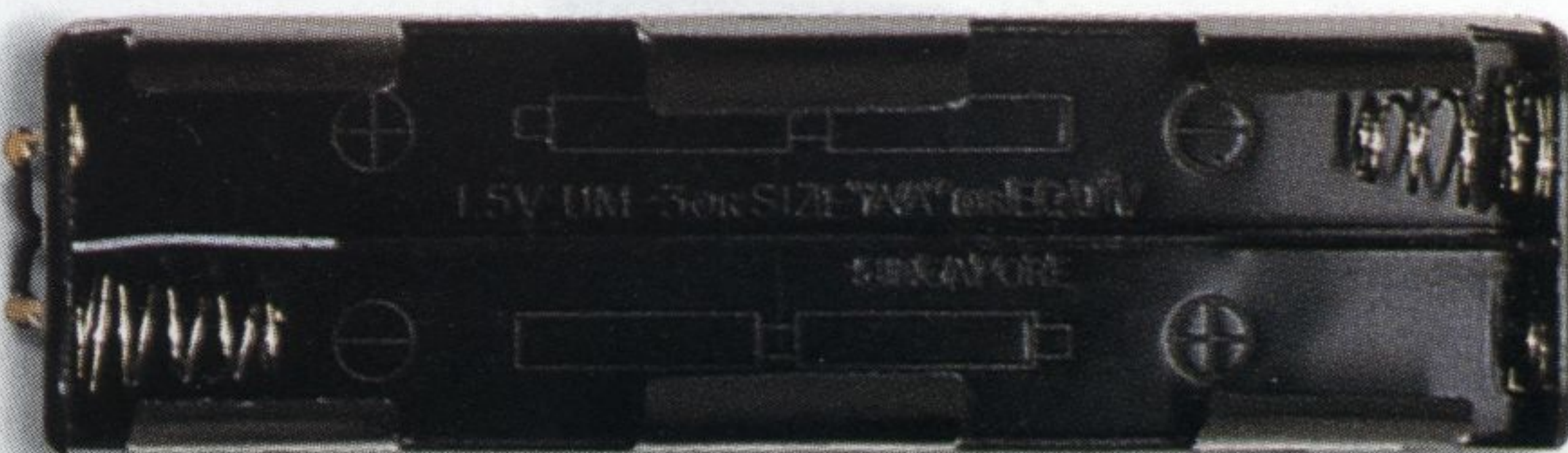
95016 Transmitter NiCd Battery for CALIBER 3P 9.6V 700mAh



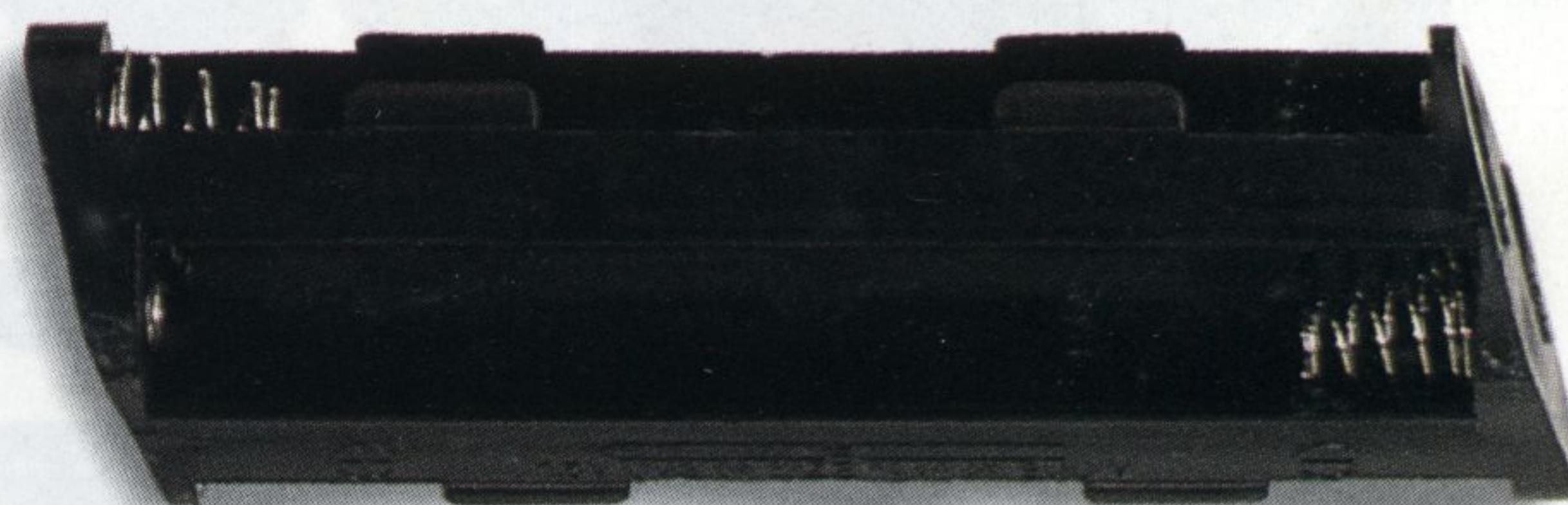
95017 Transmitter NiCd Battery for INFINITY 600/660 9.6V 600mAh

95018 Transmitter NiCd Battery for INFINITY 1000 9.6V 1100mAh

95019 Transmitter NiCd Battery for CALIBER 3PS 9.6V 700mAh



95041 Transmitter 8 Cell Dry Battery Holder



95042 Transmitter 8 Cell Dry Battery Holder for XL2P/CS2P

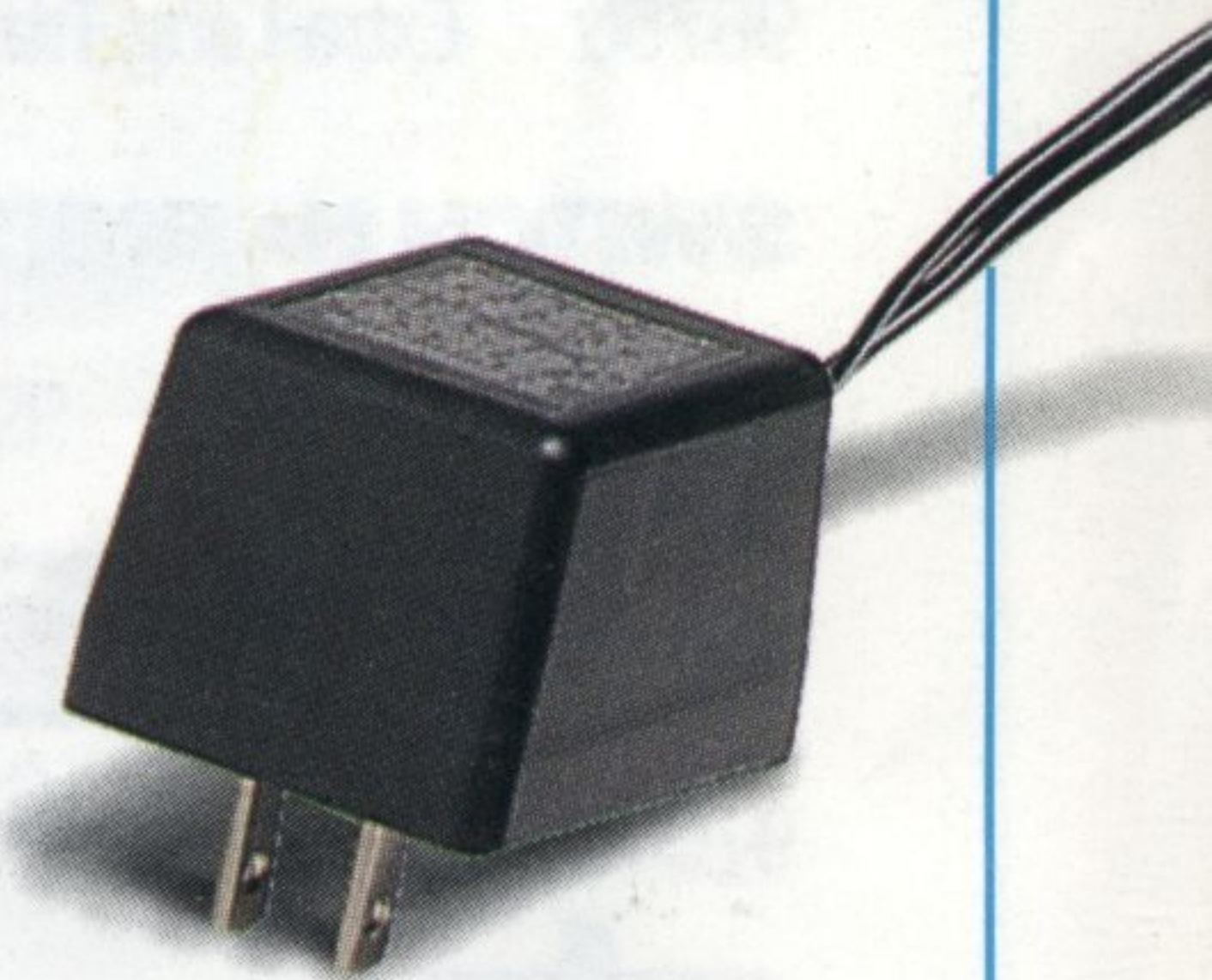
95044 Transmitter 8 Cell Dry Battery Holder for CALIBER

**CHARGERS**

95031 110V 120mA Dual Charger

95033 110V 75mA Dual Charger

95034 110V 100mA Dual Charger



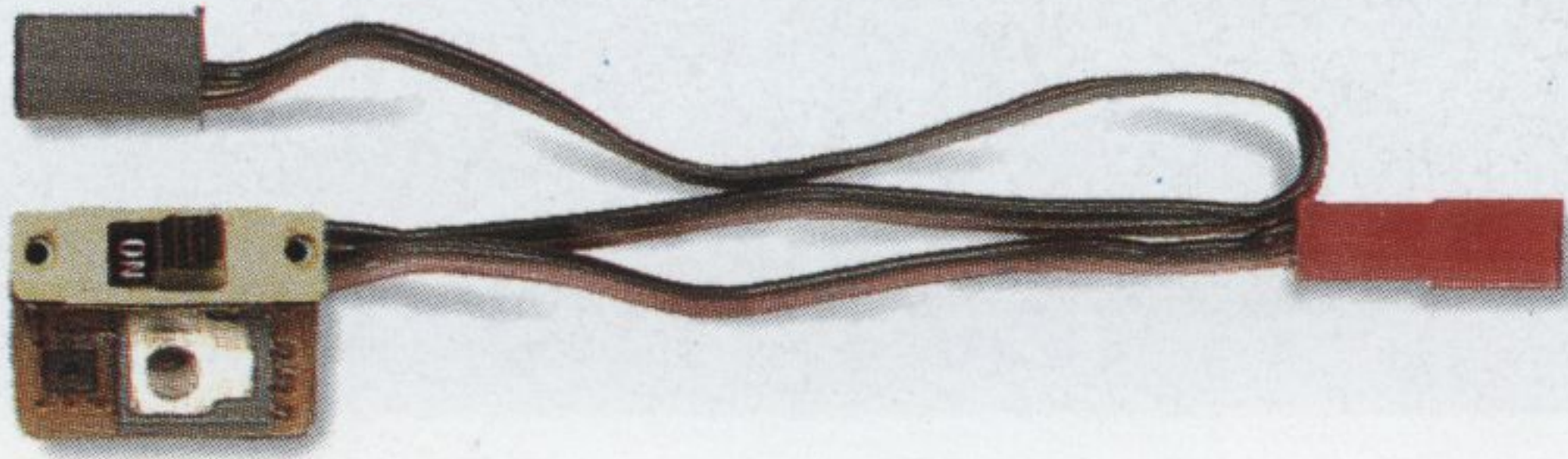
**DIMENSIONS AND WEIGHT OF RECEIVER NICD BATTERIES**

95001	L: 1.15" x W: 1.15" x H:0.71	1.05 oz.
95002	L: 2.25" x W: 1.27" x H:0.58	1.90 oz.
95003/95009	L: 2.05" x W: 1.12" x H:1.12	3.52 oz.
95004/95008	L: 2.05" x W: 2.24" x H:0.58	3.52 oz.
95005	L: 3.53" x W: 1.80" x H:0.90	7.58 oz.
95006	L: 2.68" x W: 1.23" x H:0.67	2.68 oz.
95007	L: 3.31" x W: 1.23" x H:0.67	3.42 oz.
95025	L: 2.64" x W: 1.75" x H:0.67	3.98 oz.
95026	L: 4.02" x W: 2.05" x H:1.02	11.64 oz.



# ACCESSORIES

Airtronics' complete line of accessories are compatible with all of our systems. Parts and accessories are available to meet all of your radio installation and maintenance needs.



96700 Switch Harness with B.E.C. Regulator



96701 Regulator for 94151/152 Servo



96720 Whole Grip Pad for CALIBER

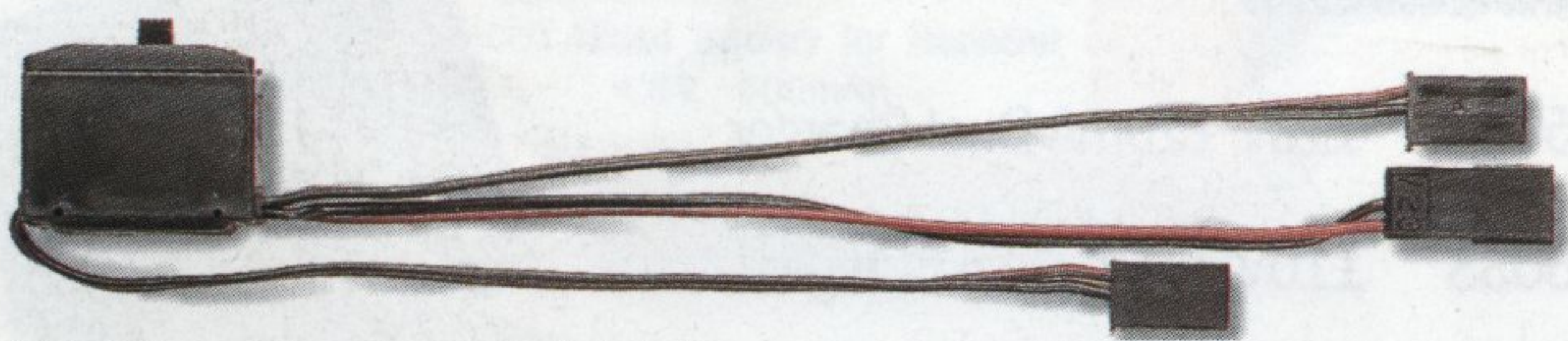


96730 Crystal Carrying Case

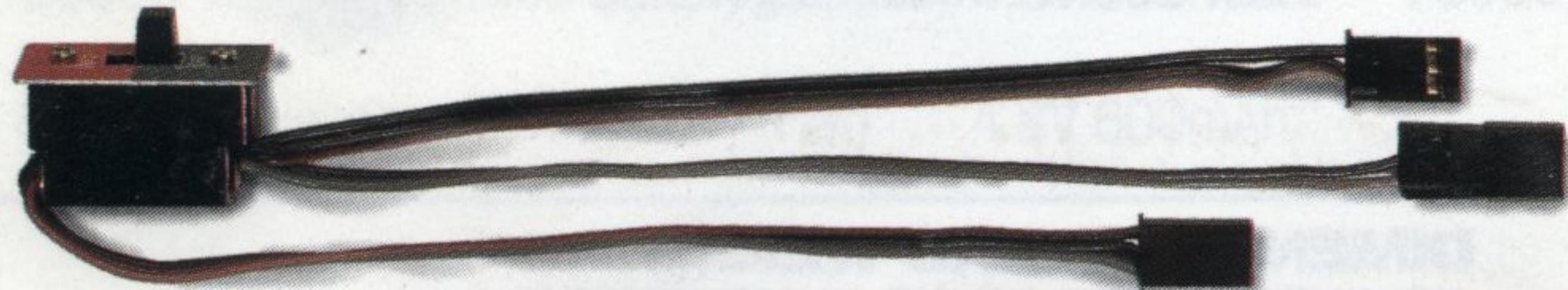


96750 Extra Long Transmitter Stick Tip Extensions (2)

## SWITCH HARNESSES



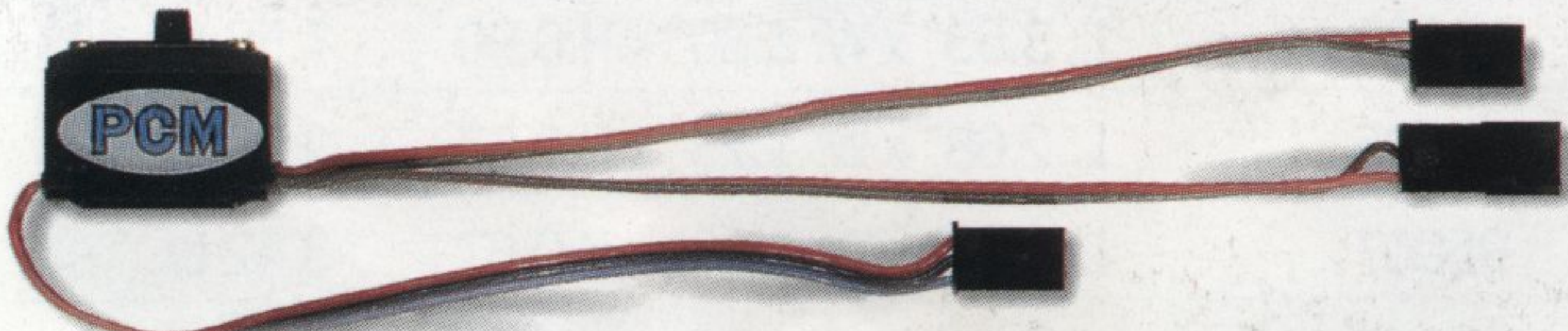
97001 Standard Switch Harness



97002 Switch Harness with D.S.C. for Championship Series



97004 Switch Harness with B.E.C. Plug



97005 Standard PCM Switch Harness

97006 Switch Harness with D.S.C. for Infinity 1000

## EXTENSION CABLES AND "Y" HARNESSES



97010 6" Extension Cable

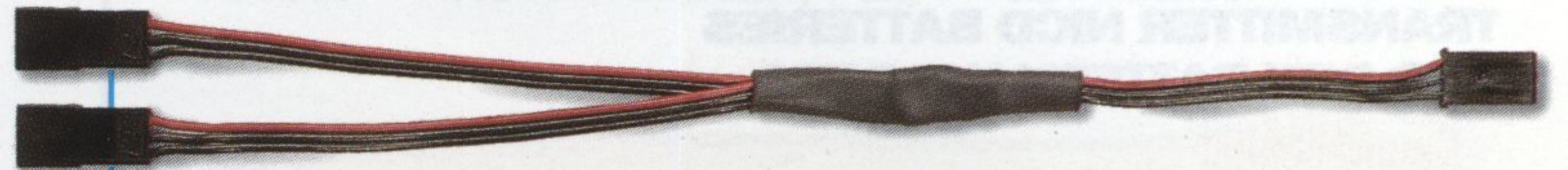


97011 12" Extension Cable



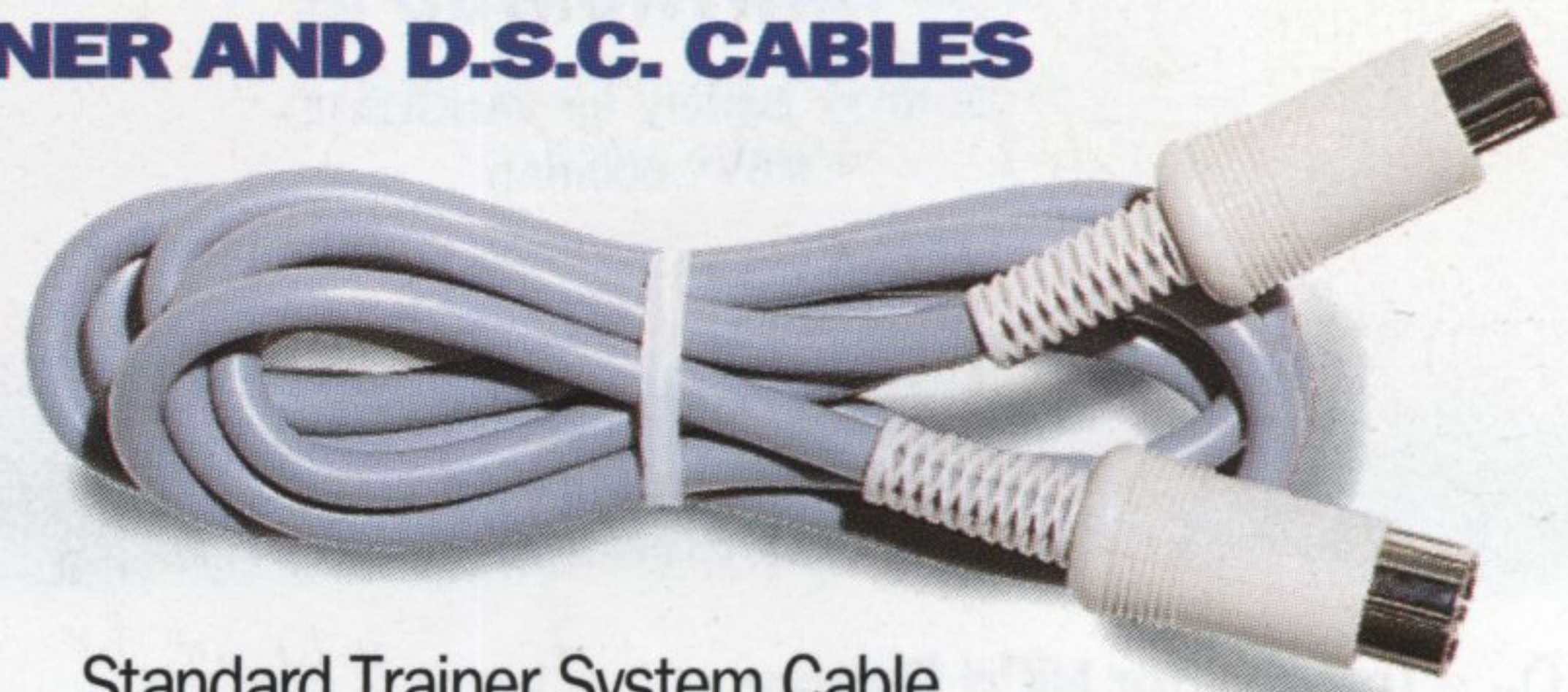
97013 24" Extension Cable

97030 30" Extension Cable



97020 Dual Servo "Y" Harness

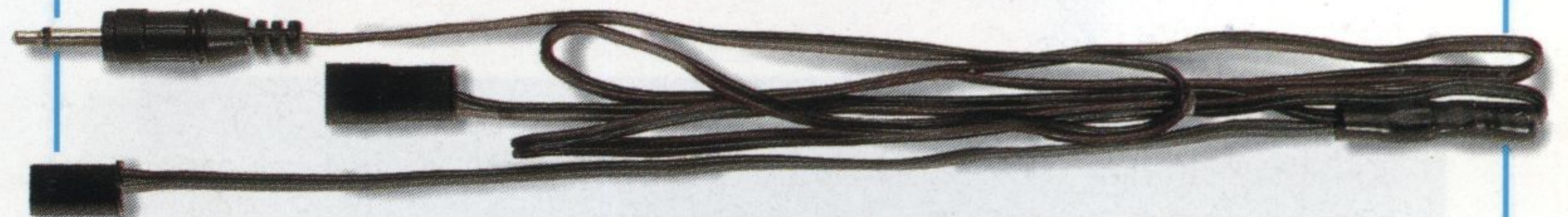
## TRAINER AND D.S.C. CABLES



97100 Standard Trainer System Cable

97101 INFINITY 600/1000 Trainer System Cable

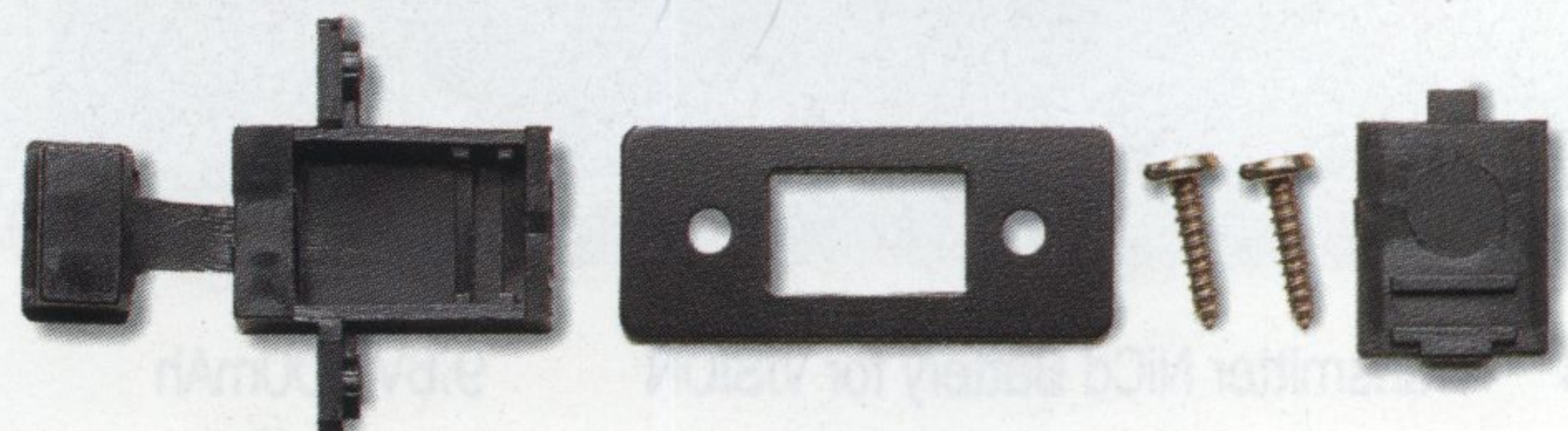
97102 INFINITY 660/QUASAR Trainer System Cable



97031 Direct Servo Controller (D.S.C.) Cable for CALIBER 3P/3PS

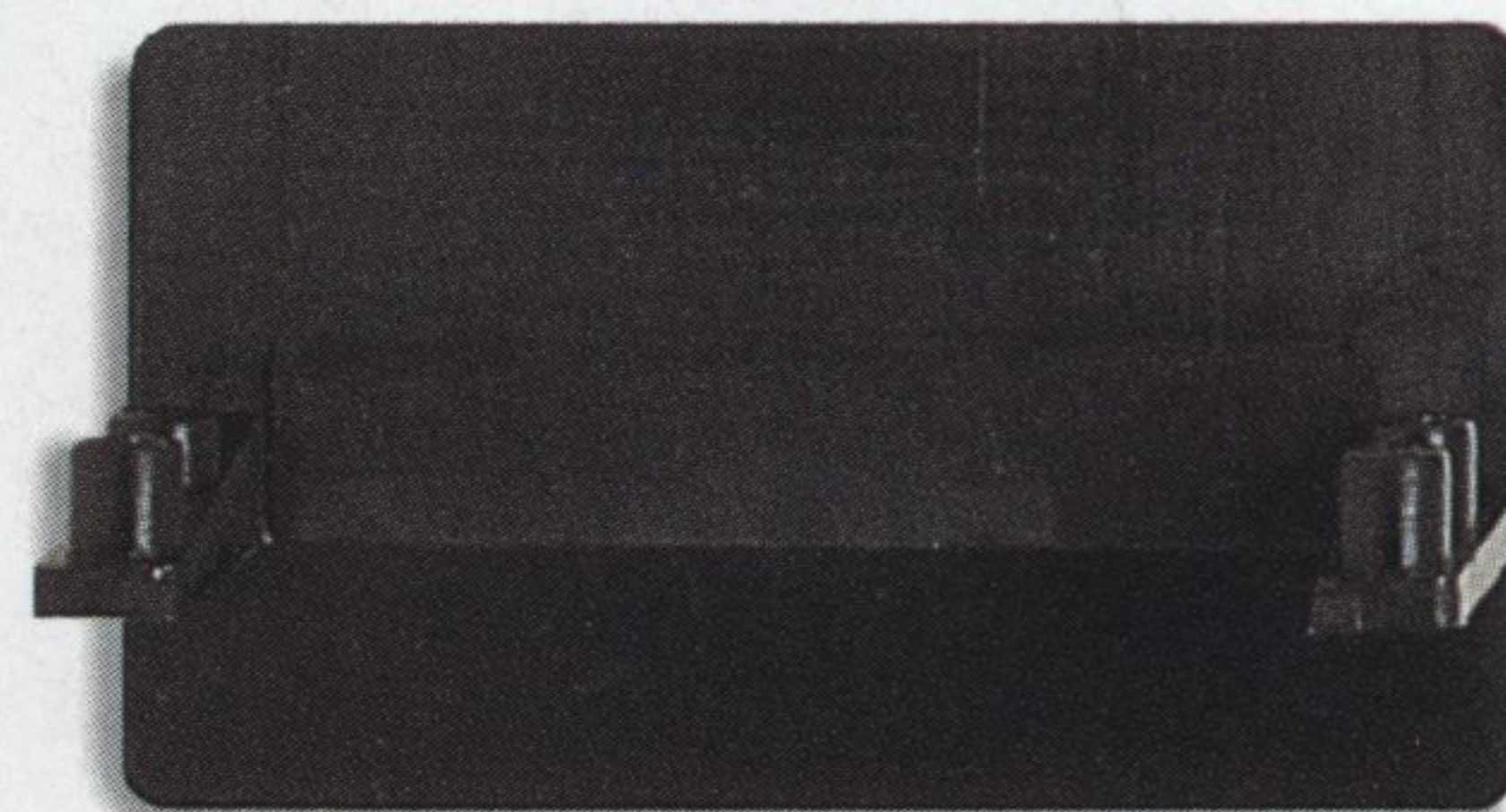
97032 Direct Servo Controller (D.S.C.) Synthesizer Cable for INFINITY 1000

## EXTERNAL CHARGE MOUNTS



97050 Standard External Charge Mount

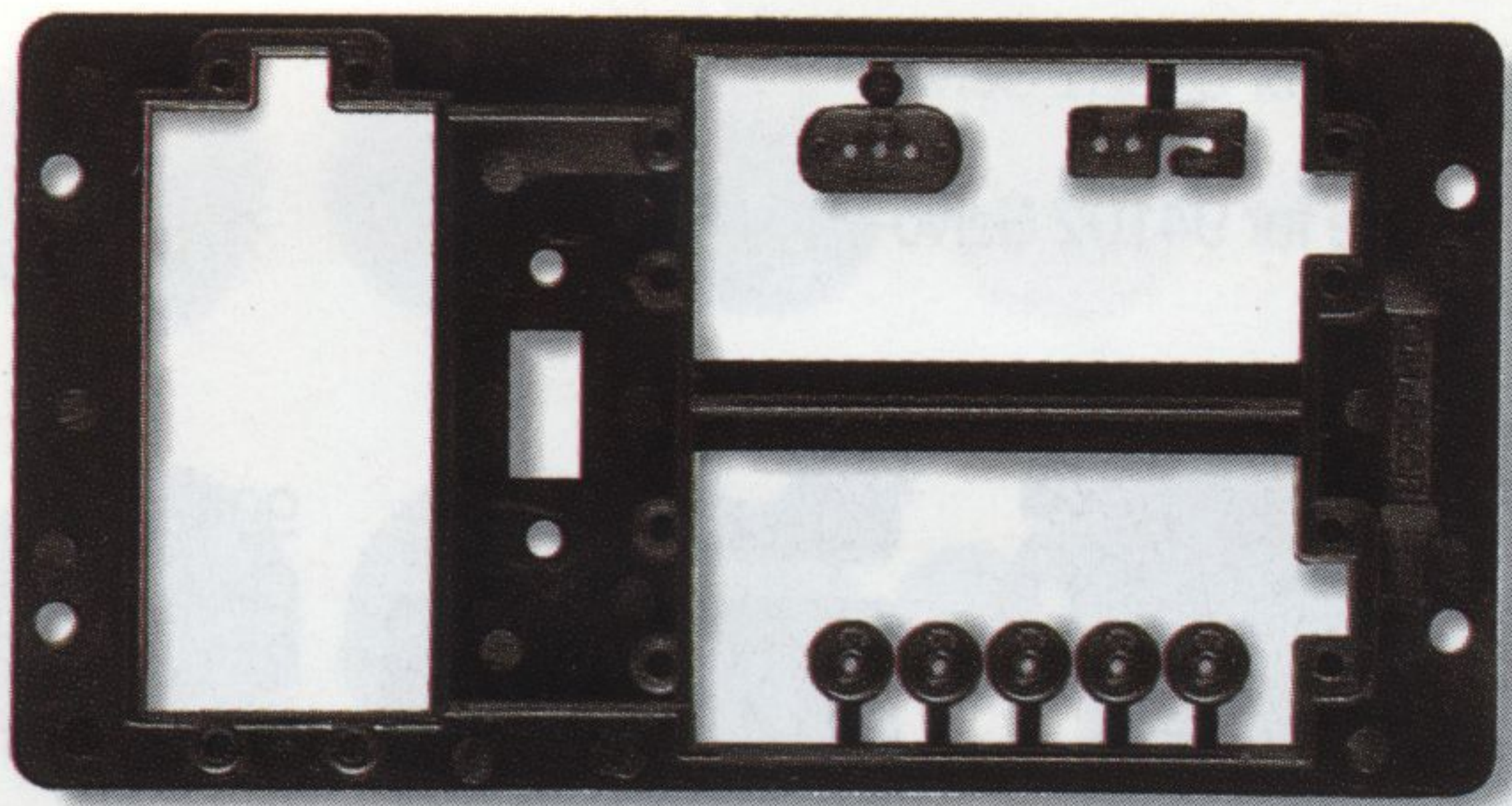
## SERVO TRAYS



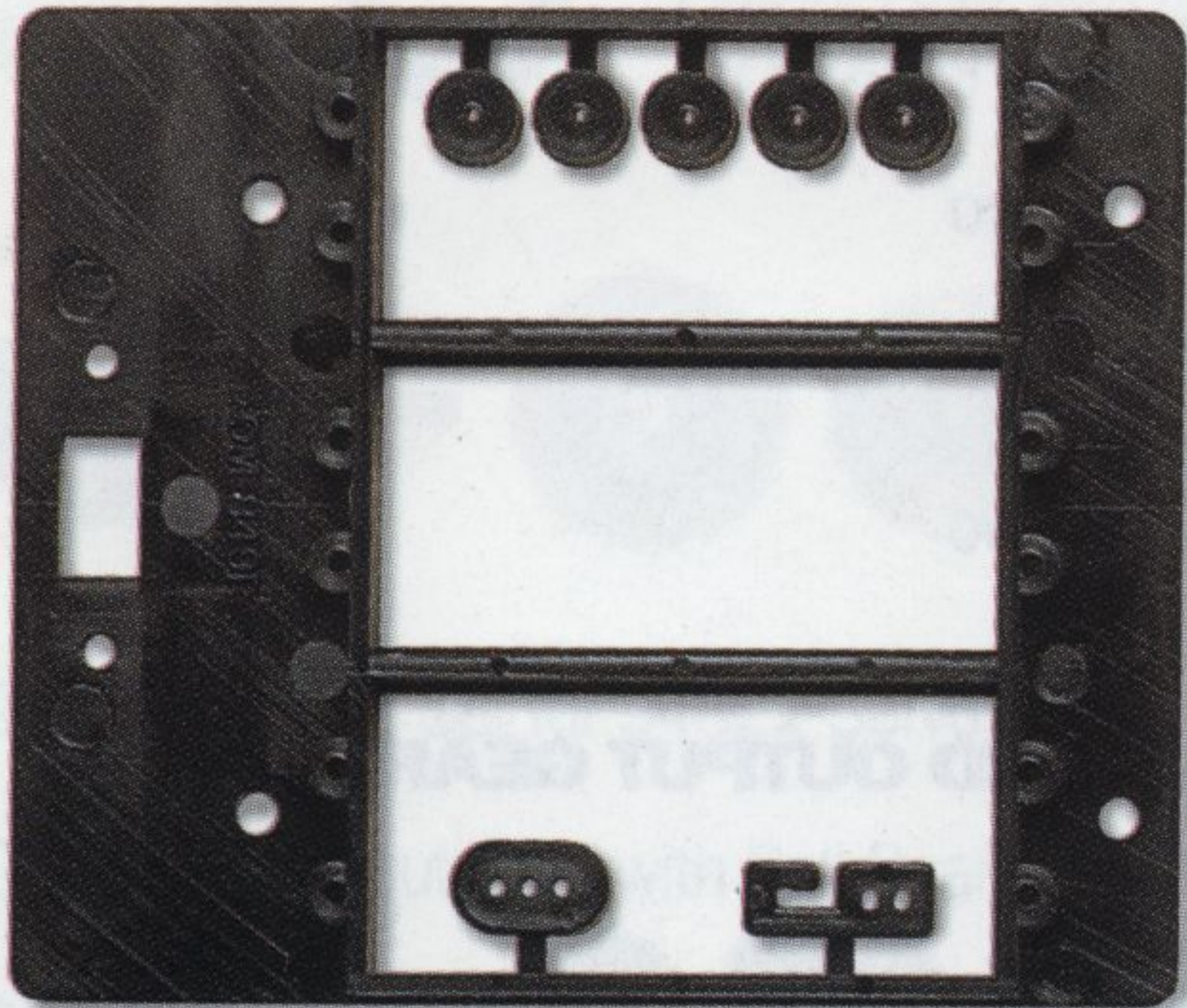
98200 Aileron Servo Tray for Mini Servos

98203 Aileron Servo Tray for Standard/PRO/CONTEST Servo

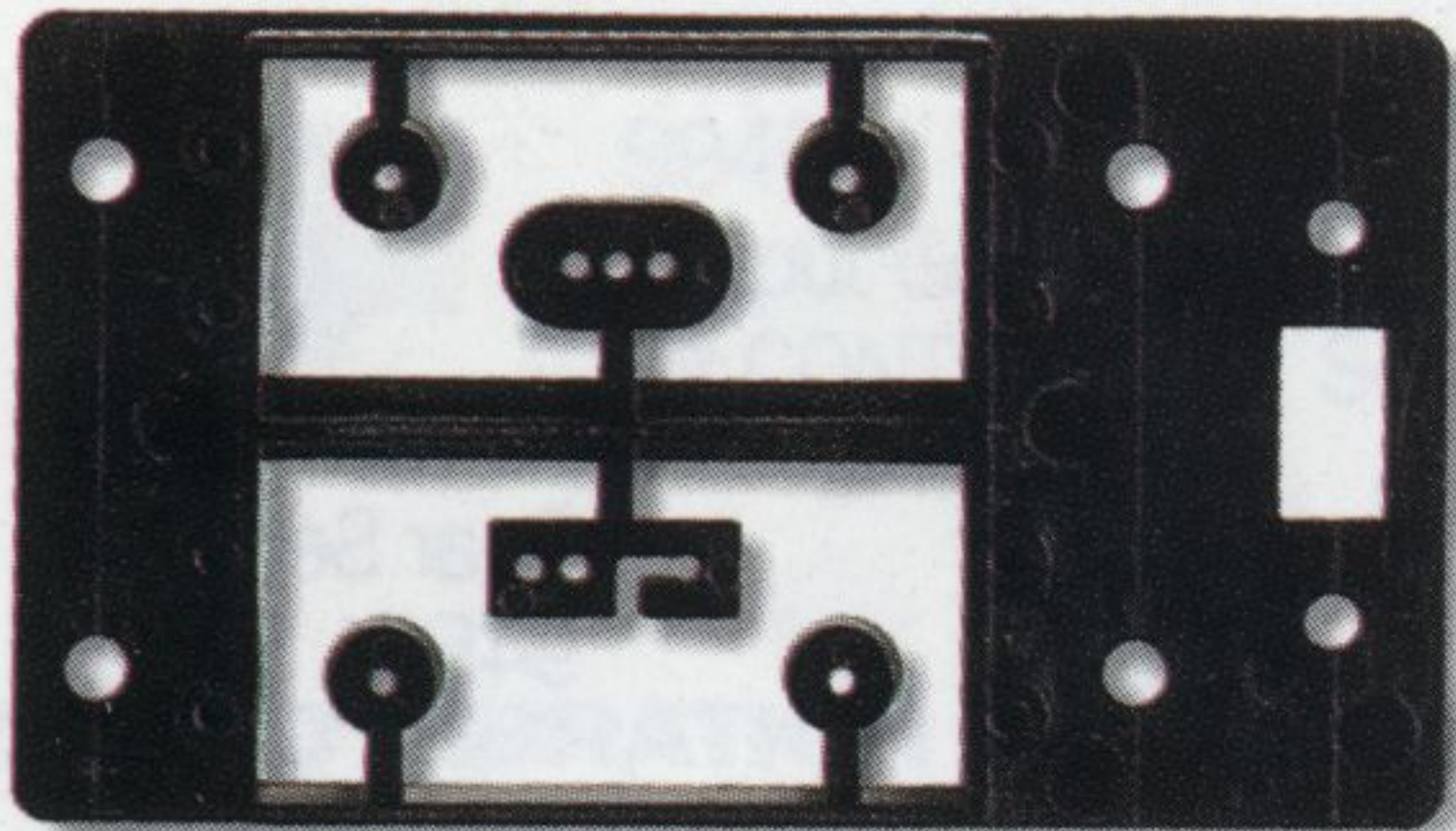




98213 2 + 1 Servo Tray for Standard / PRO/CONTEST Servos



98220  
3 Side by Side Servo  
Tray for Mini Servos

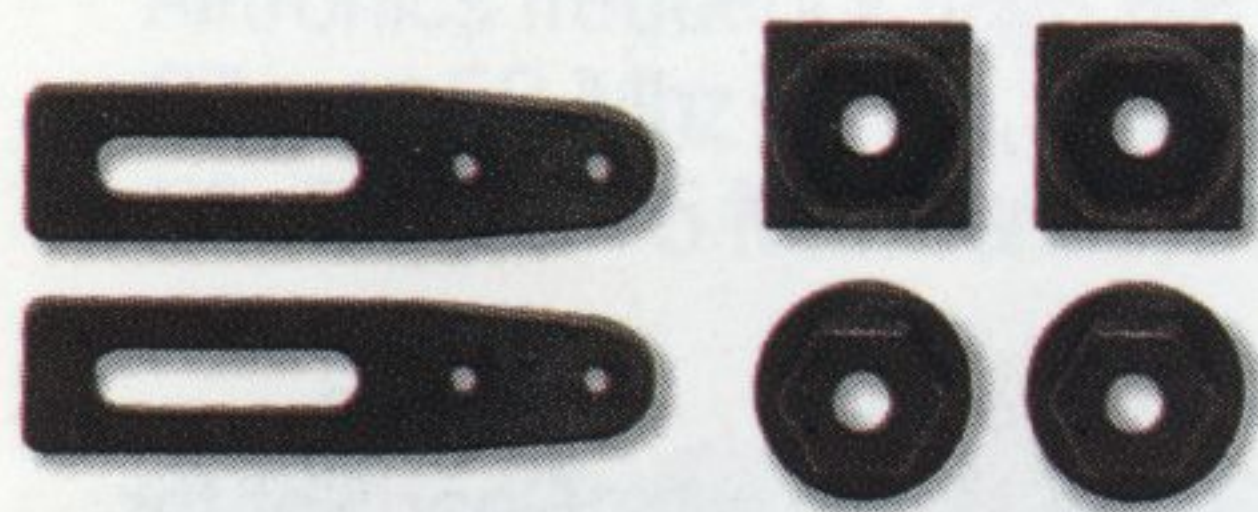


98221  
2 Side by Side  
Servo Tray for  
94401/403/407  
Servos

### SERVO OUTPUT ARMS

Servo arms play an integral part in linking the servo to the control surface. Airtronics offers a full range of arms including wheel, cross, star, heavy duty, retract, and adjustable types.

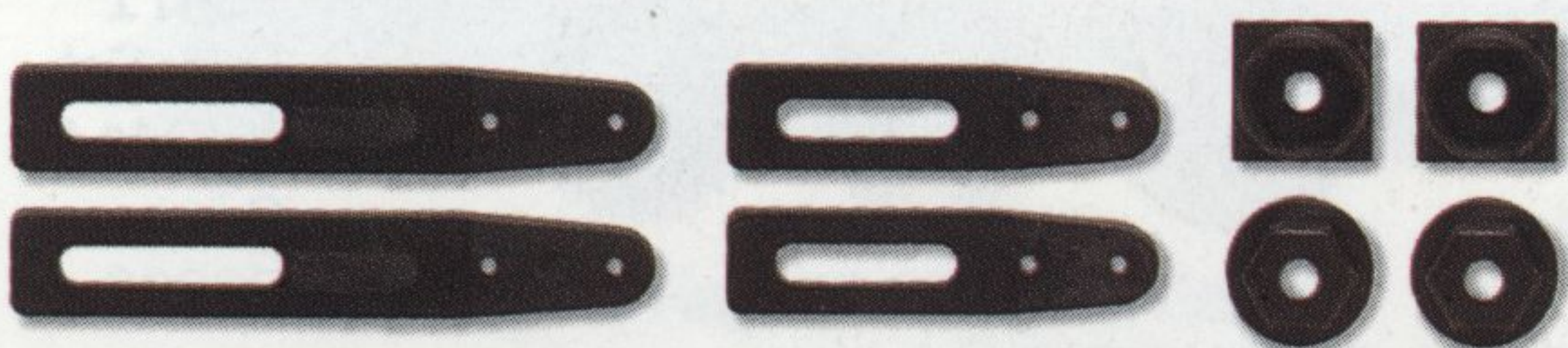
98301 Servo Arm Assortment for 94401/403/407/501 Servos



98303  
Adjustable Servo Arm for  
94401/403/407/501 Servos



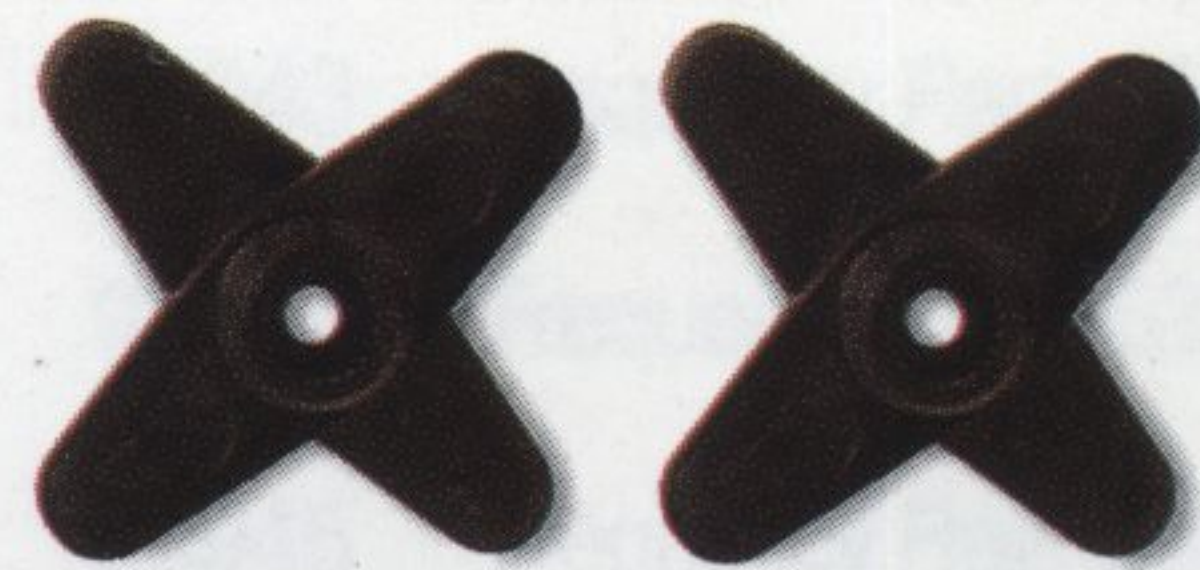
98311 Servo Arm Assortment for Standard Servos



98314 Adjustable Servo Arm for Standard Servos

98317 4 Point Servo Arm for Standard Servos (2)

98318 Servo Wheel for Standard Servos (2)



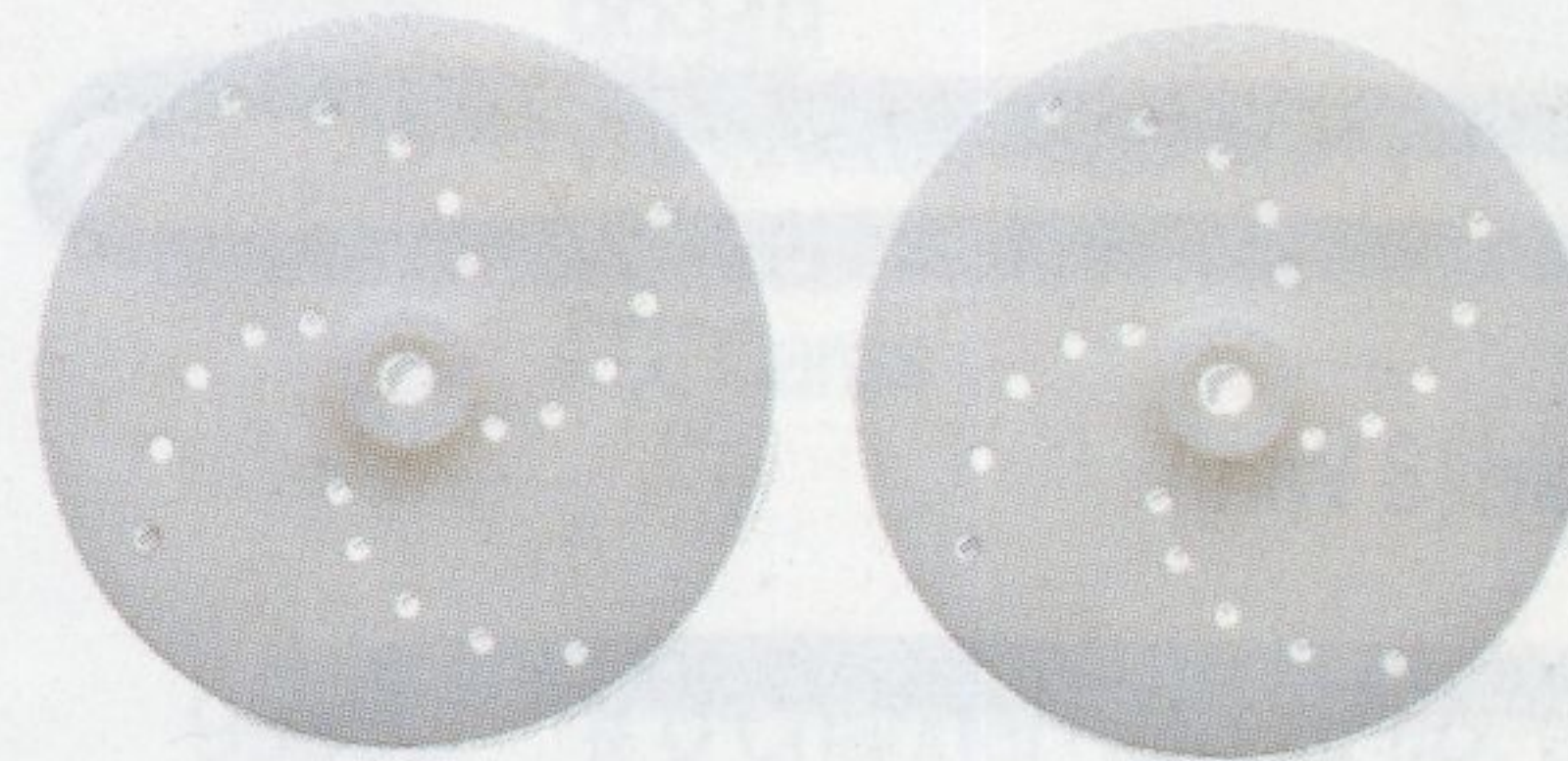
98319  
Servo Arm for  
Retract Servos (2)



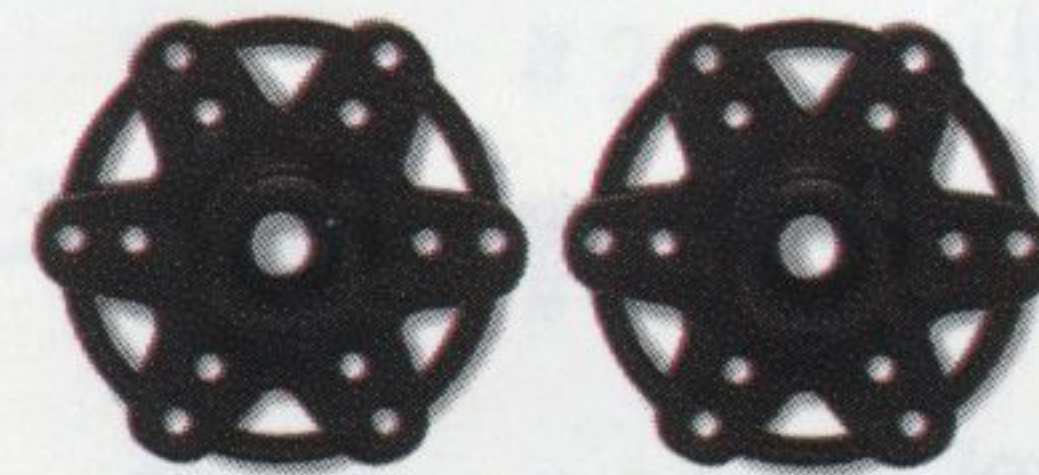
98322  
Heavy Duty Servo Arm  
for Standard Servos



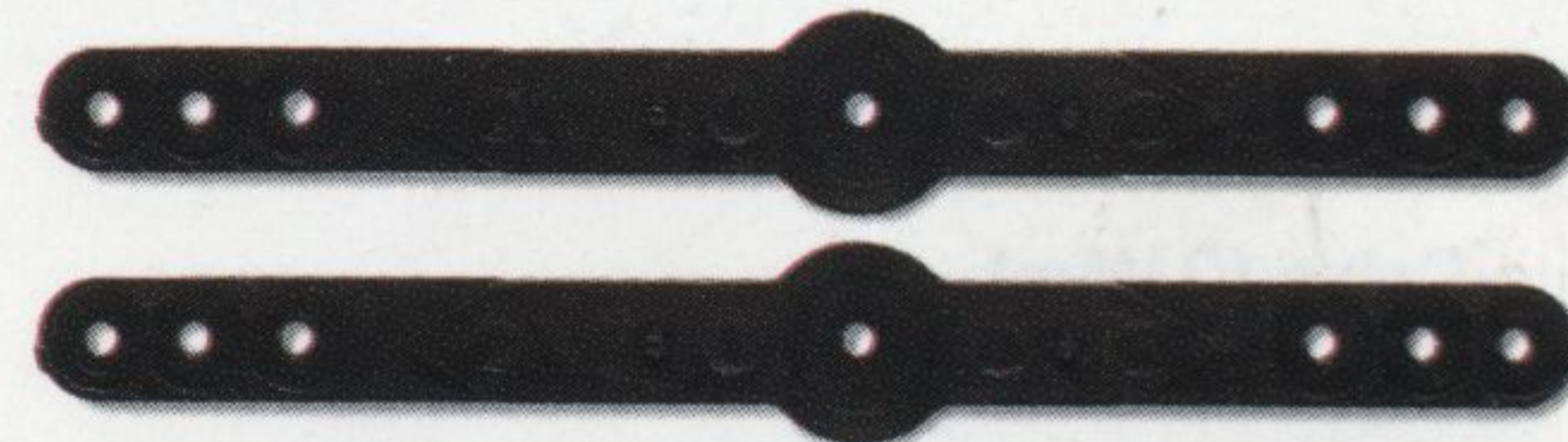
98323  
Extra Large 4 Point  
Servo Arm for  
Standard Servos (2)



98324  
Extra Large Servo  
Wheel for  
Standard Servos (2)



98325  
6 Point Servo Arm for  
Standard Servos (2)



98326  
Sail Winch  
Servo Arm

### TRANSMITTER ANTENNAS

99108 Transmitter Antenna for VECTOR/AVENGER



99109 Transmitter Antenna for XL2P/CS2P



99110 Transmitter Antenna for VANGUARD/ VISION/  
INFINITY 600A, 660



99112 Transmitter Antenna for CALIBER 3P

99113 Transmitter Antenna for INFINITY 1000

99114 Transmitter Antenna for CALIBER 3PS



### TRANSMITTER NECK AND WRIST STRAPS

99103 Deluxe Transmitter Neck Strap

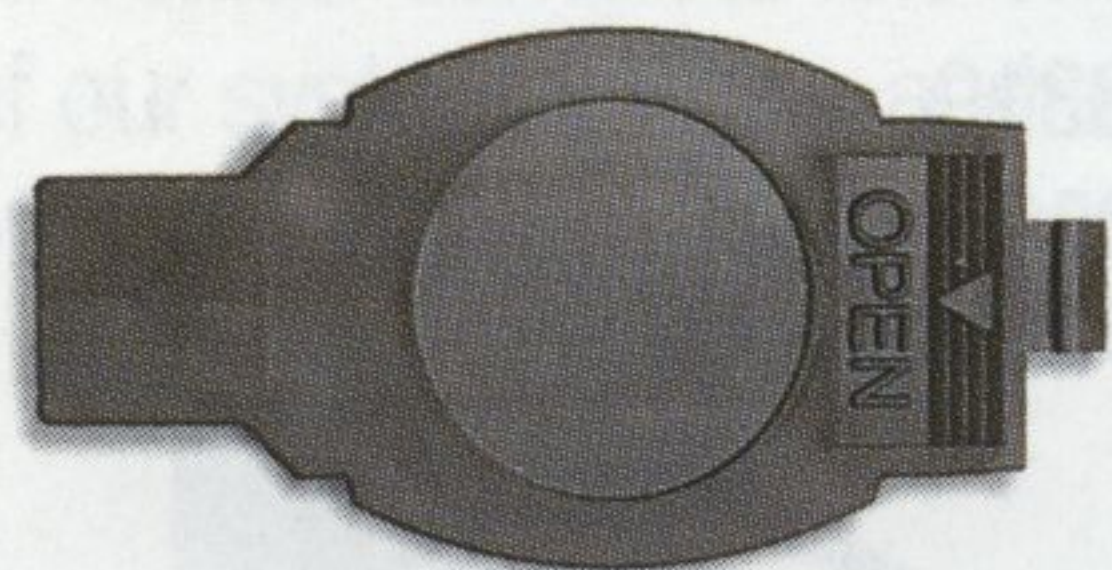


99104 Deluxe Transmitter Wrist Strap for Pistol Grip Transmitters



**TRANSMITTER BATTERY COVERS**

99200 Transmitter Battery Cover for VT2P

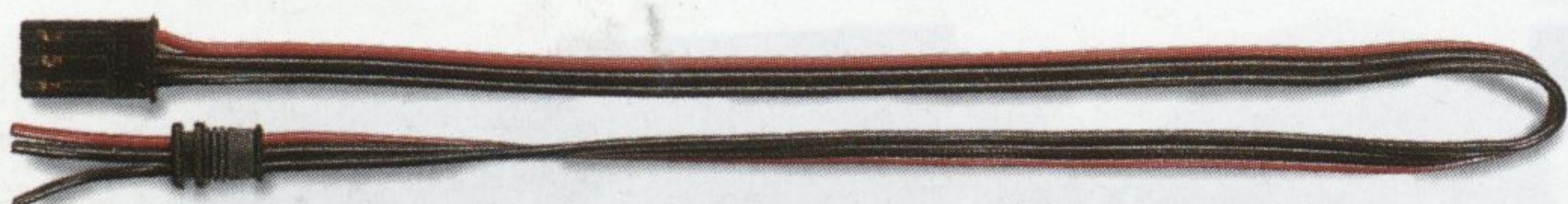


99201 Transmitter Battery Cover for XL2P/CS2P



99202 Transmitter Battery Cover for CALIBER

**CONNECTORS**



99401 Servo Plug with Cable (3 Wire)



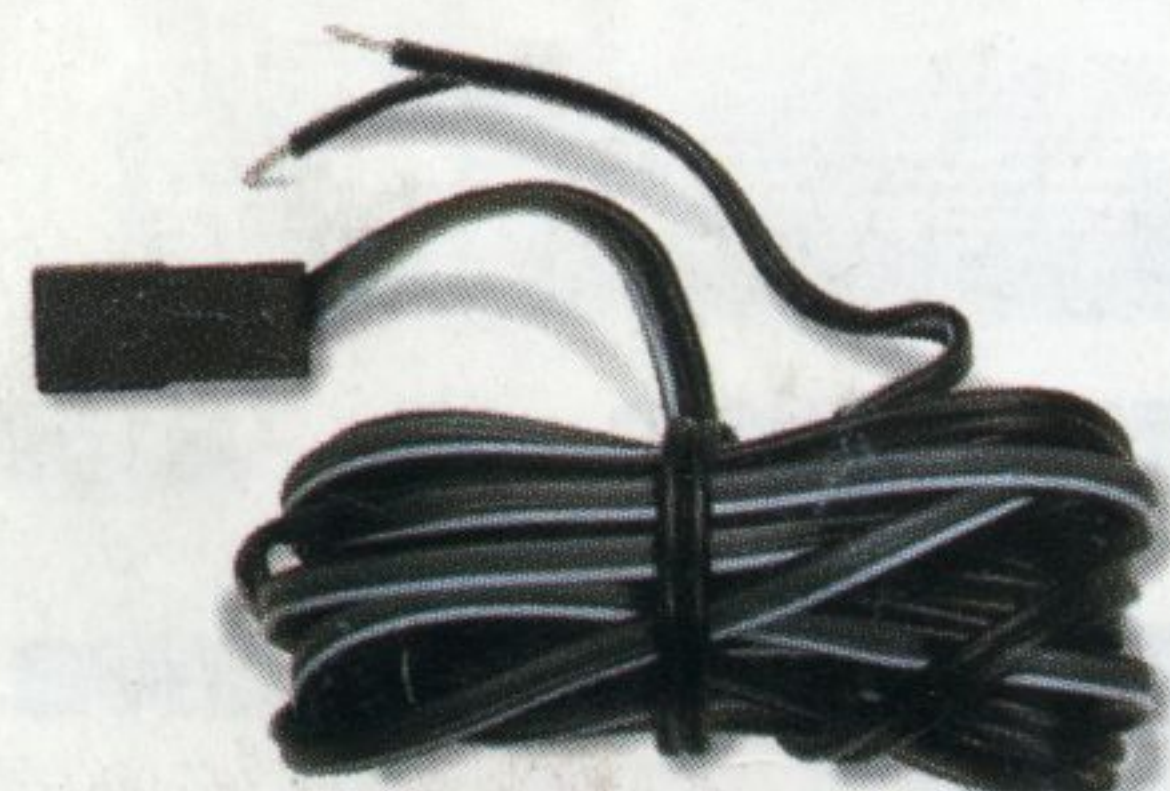
99402 Servo Socket with Cable (3 Wire)



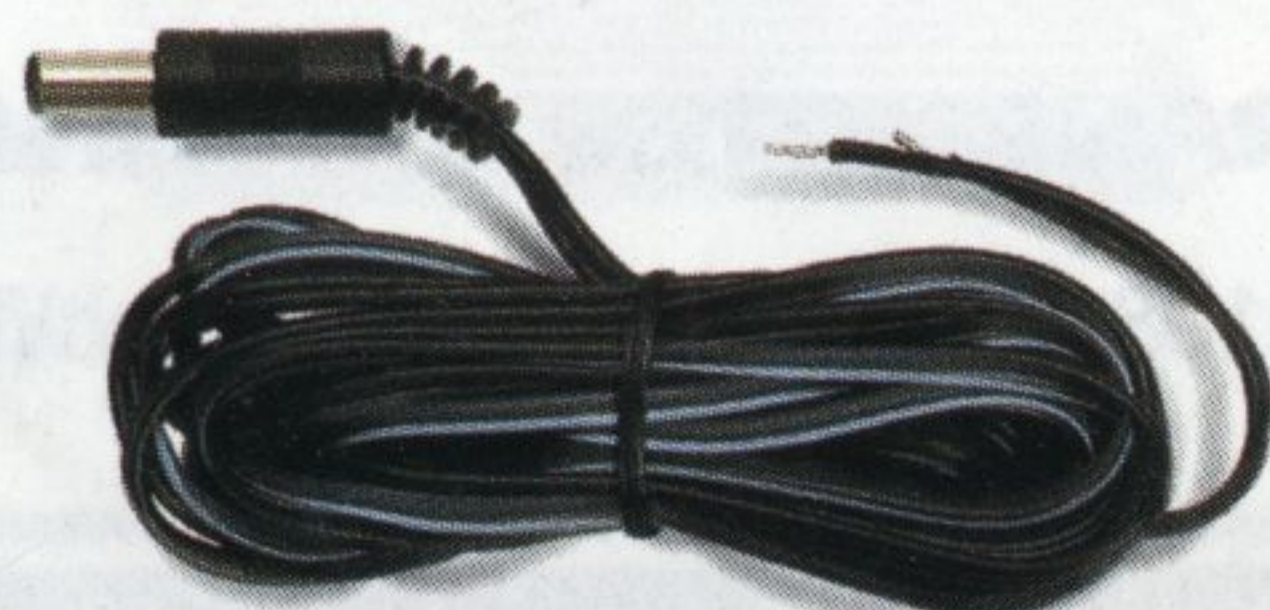
99701 Battery Socket with Cable (2 Wire)



99702 Battery Plug with Cable (2 Wire)

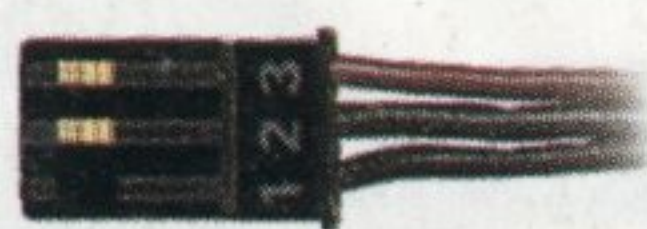


99703 Receiver Charging Socket with Cable

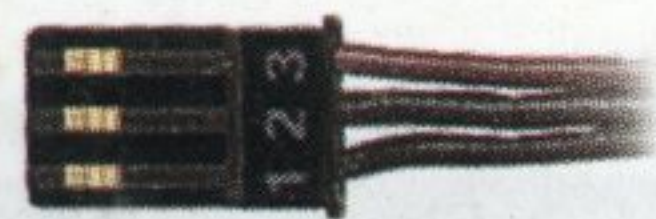


99704 Transmitter Charging Plug with Cable

**CONNECTOR POLARITY**



3 - Battery Positive  
2 - Battery Negative



3 - Battery Positive  
2 - Battery Negative  
1 - Control Signal

**SERVO CASES**

99410 Case for 94401/403/407/408 Servos

99417 Case for 94631 Servo

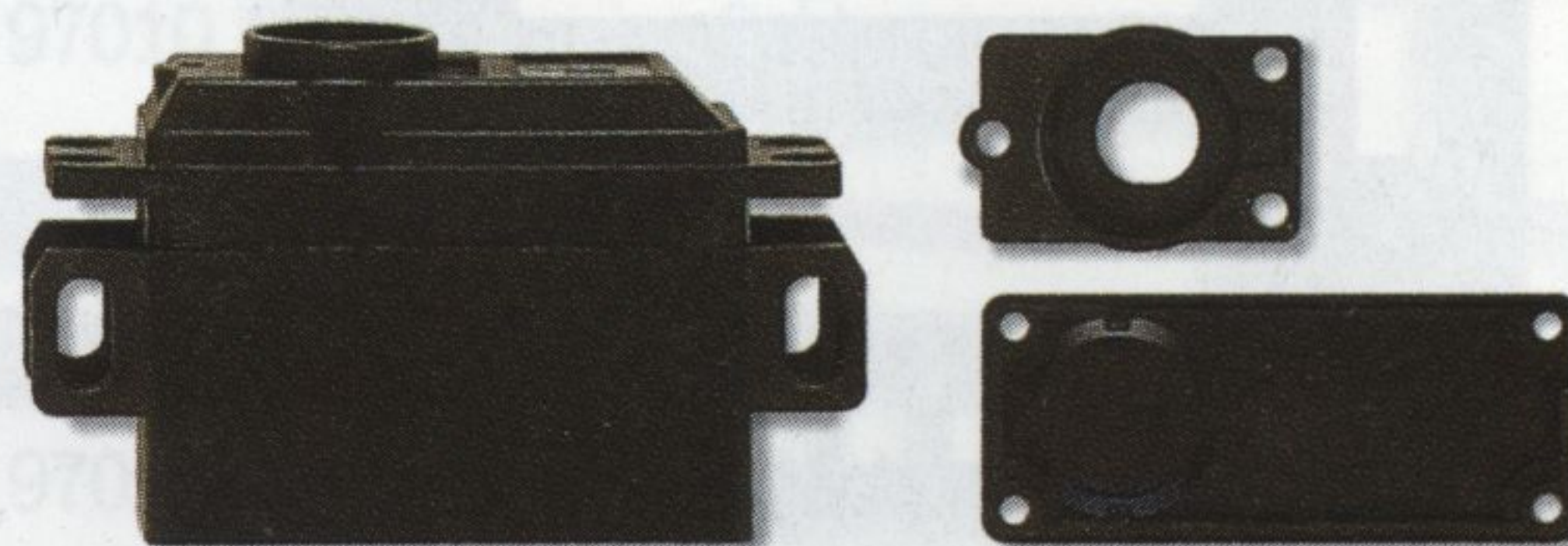
99418 Case for 94501 Servo

99447 Case for 94510 Servo

99449 Case for CONTEST Servos

99450 Case for 94831 Servo

99470 Case for 94102 Servo



99480 Case for 94141/143/144 Servos

99481 Case for 94151 Servo

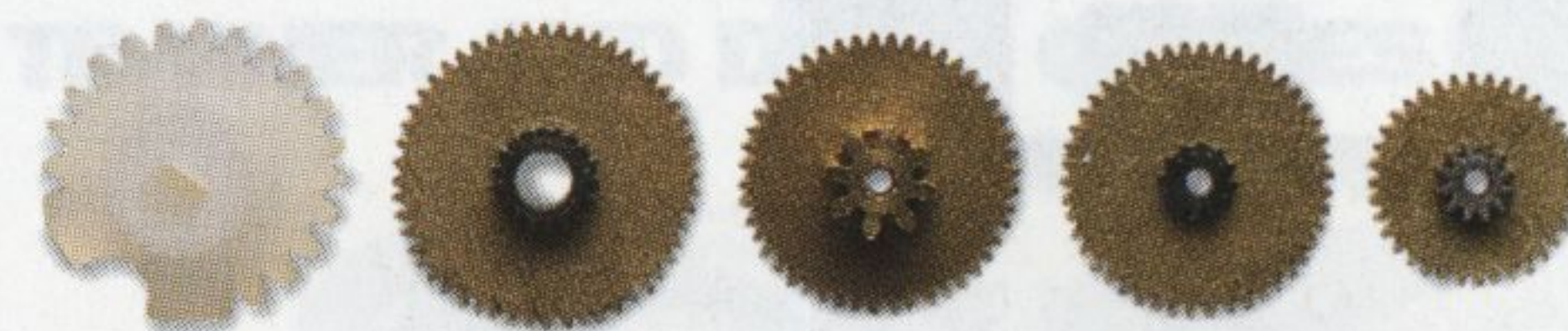
99482 Case for 94161 Servo

99483 Case for 94741 Servo

99484 Case for 94152 Servo

99485 Case for 94322 Servo

**SERVO GEAR SETS AND OUTPUT GEARS**



99420 Gear Set for 94401 Servo

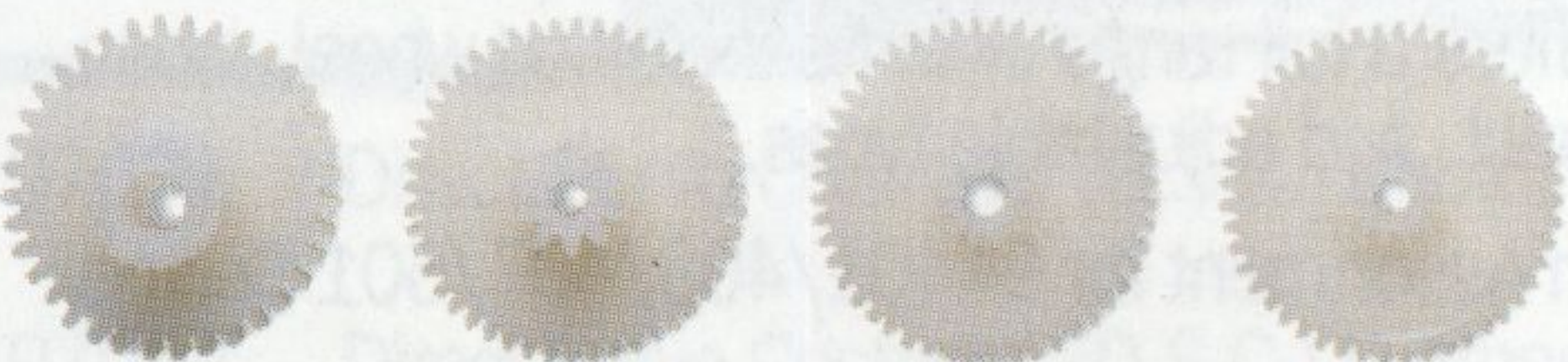
99422 Gear Set for 94510 Servo



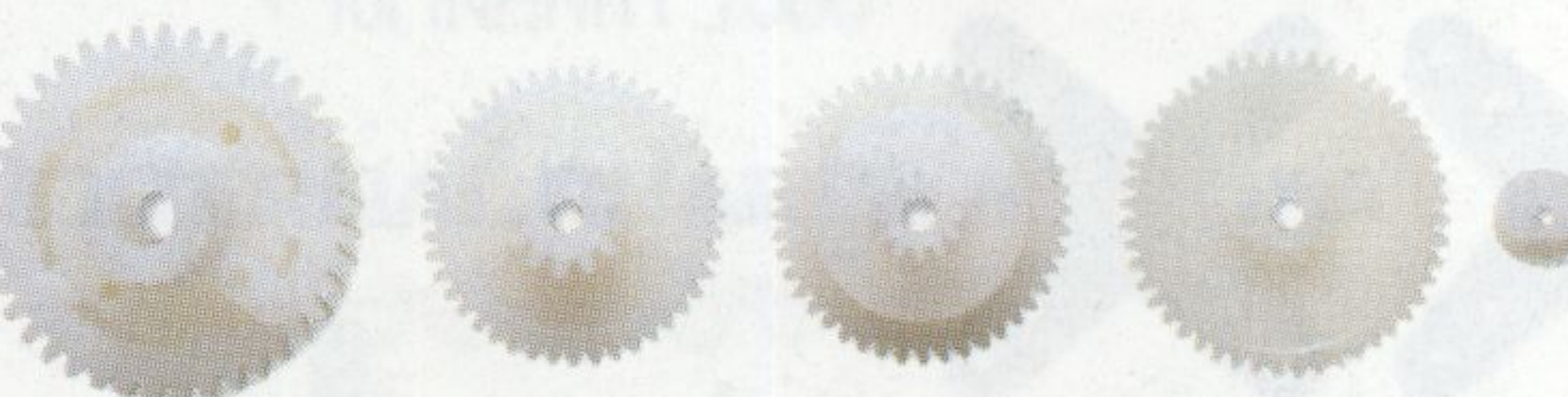
99429 Gear Set for 94501 Servo

99445 Gear Set for 94631/635 Servos

99446 Gear Set for 94403 Servo



99451 Gear Set for 94831 Servo



99452 Gear Set for 94732/735 Servos

99453 Gear Set for 94734 Servo

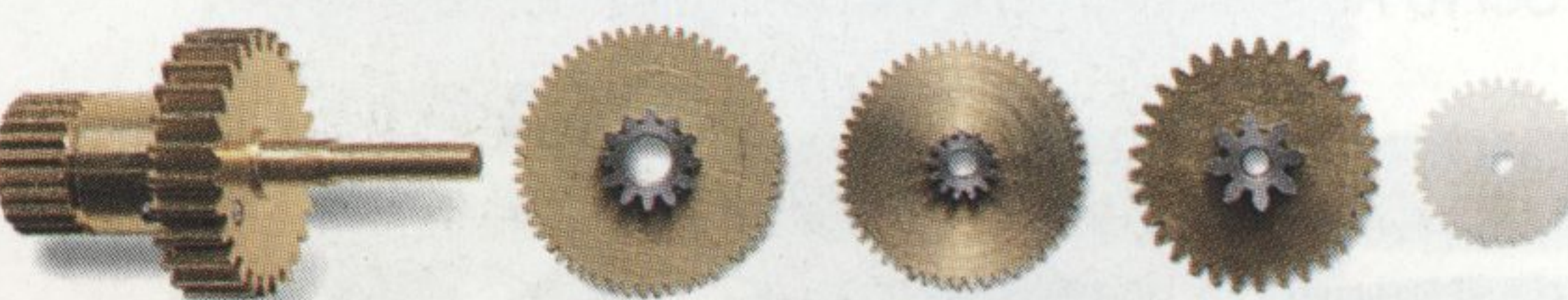
99455 Gear Set for 94151/737 Servos



99456 Gear Set for 94738 Servo

99457 Gear Set for 94741 Servo

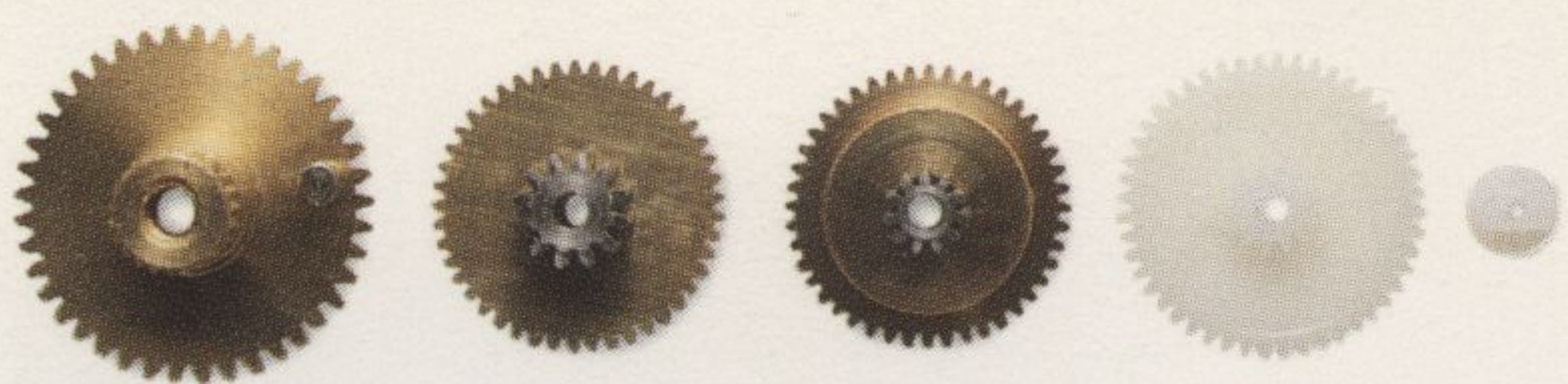
99465 Gear Set for 94102 Servo



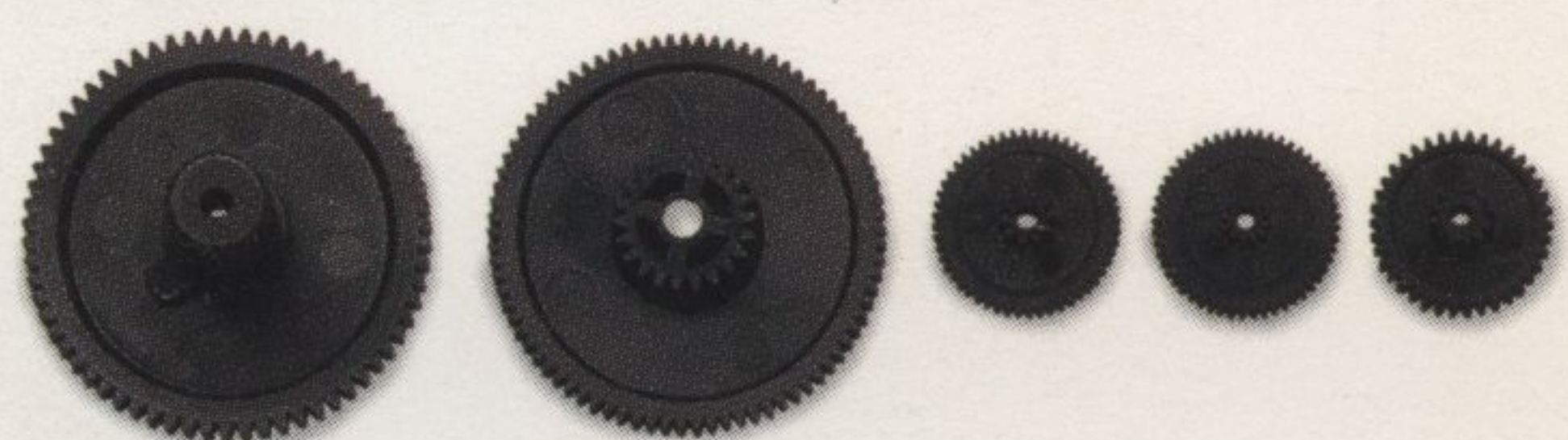
99471 Gear Set for 94141 Servo

99472 Gear Set for 94143 Servo





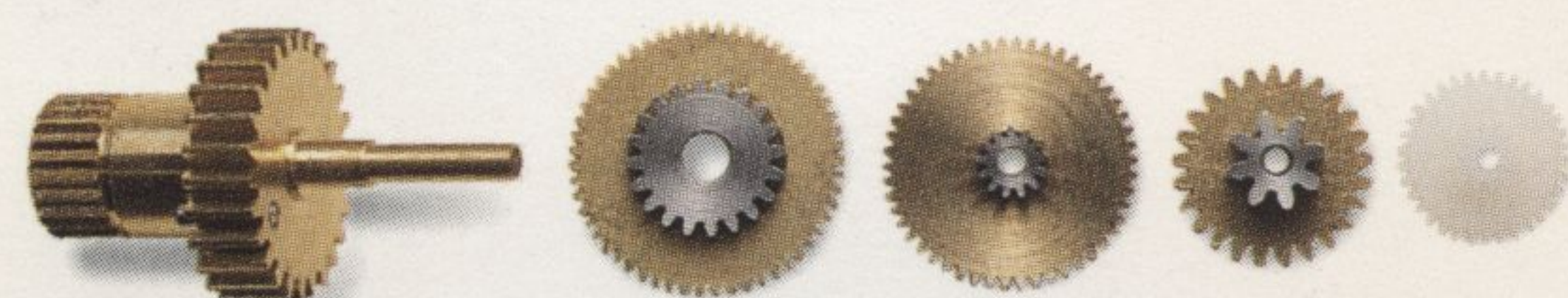
99473  
Gear Set for  
94152/161  
Servos



99475  
Gear Set for  
94581 Sailwinch  
Servo



99440  
Output Gear with Ball Bearing  
for 94401/403/407



99476  
Gear Set  
for 94144  
Servo

99477 Gear Set for 94322 Servo

99460 Output Gear with Ball Bearing for 94510 Servo

99461 Output Gear with Ball Bearing for 94831 Servo



99462  
Output Gear with Ball Bearings  
for CONTEST/151 Servos

### SERVO VIBRATION ISOLATORS

99430 Vibration Isolators for Micro Servos

99431 Vibration Isolators for 94510 Servo

99432 Vibration Isolators for Mini Servos



99434 Vibration Isolators for Standard/CONTEST/PRO Servos

### TRANSMITTER FREQUENCY FLAGS AND I.D. CARDS

Airtronics frequency flags are available for individual frequencies in the 27 and 53 Mhz bands, and as individual Channel I.D. numbers for the 50, 72 and 75 Mhz bands.

99931 Frequency Flag, 26.995 MHz, Brown

99932 Frequency Flag, 27.045 MHz, Red

99933 Frequency Flag, 27.095 MHz, Orange

99934 Frequency Flag, 27.145 MHz Yellow



99935 Frequency Flag, 27.195 MHz, Green

99936 Frequency Flag, 27.255 MHz, Blue

99941 Frequency Flag, 53.100 MHz, Black/Brown

99942 Frequency Flag, 53.200 MHz, Black/Red

99943 Frequency Flag, 53.300 MHz, Black/Orange

99944 Frequency Flag, 53.400 MHz, Black/Yellow

99945 Frequency Flag, 53.500 MHz, Black/Green

99946 Frequency Flag, 53.600 MHz, Black/Blue



99947 Frequency Flag, 53.700 MHz, Black/Violet

99948 Frequency Flag, 53.800 MHz, Black/Gray



99949  
Transmitter Antenna  
Holder for Channel  
I.D. Cards



99951  
# 1 Channel  
Number I.D. Card

99950 # 0 Channel Number I.D. Card

99952 # 2 Channel Number I.D. Card

99953 # 3 Channel Number I.D. Card

99954 # 4 Channel Number I.D. Card

99955 # 5 Channel Number I.D. Card

99956 # 6 Channel Number I.D. Card

99957 # 7 Channel Number I.D. Card

99958 # 8 Channel Number I.D. Card

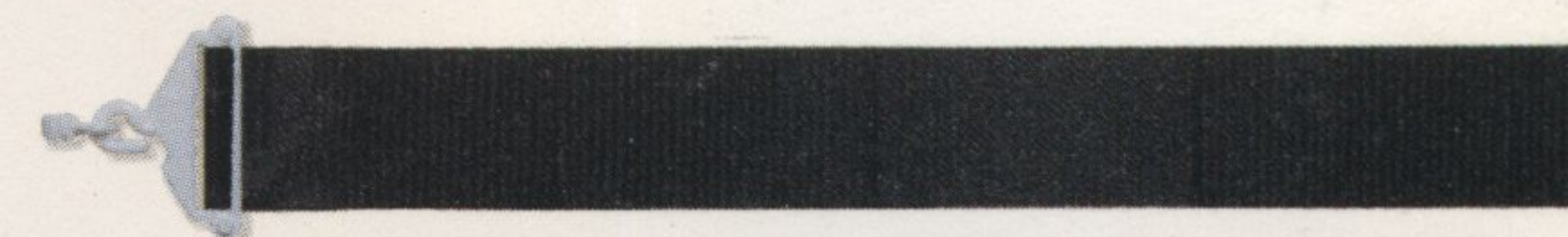
99959 # 9 Channel Number I.D. Card



99960 Red Antenna Streamer 72 MHz



99961 Yellow Antenna Streamer 75 MHz



99962 Black Antenna Streamer 50 MHz

### Warranty Information

Airtronics offers one of the longest and best warranties in the radio control industry today. The length and protection that our warranty provides you is a reflection of our confidence in our equipment.

All components in your AIRTRONICS R/C system are warranted to be free from factory defects in materials or workmanship for a period of 12 months beginning from the date of purchase. During this 12 month period, AIRTRONICS will repair or replace, at our option, any defective parts without charge to you for either parts or the labor involved.





**TRONICS**



11 Autry, Irvine, CA 92718

