

# CANNON RADIO CONTROL

SYSTEMS



# FOREWORD

#### INTRODUCTION

This brochure contains descriptions, specifications and prices for each NEW Series of CANNON Equipment. Items included with each system are shown in related illustrations. All variations of transmitters, receivers, servos etc. are pictorially shown to aid in equipment understanding and selection. Individual components and accessories are separately covered in the back of this brochure.

Because of equipment variety offered, all CANNON Systems are built to order. Top quality is reflected throughout the entire CANNON line, all of which is Designed, Manufactured and Serviced in the U.S.A.! The following equipment selection is offered.

Mini-Sport (Model 810) . . . . 2 thru 5 CH.
Super-Mini (Model 820) . . . 2 thru 5 CH.
Tini Series (Model 825) . . . 2 thru 6 CH.
Professional (Model 830) . . . 5 or 6 CH.
Gran Prix (Model 840) . . . . 7 CH.

#### BASIC DESCRIPTION

All CANNON R/C Systems are of proven Digital design, providing full Proportional Control of all channels. Transmitters, Receivers, Servos and Batteries are operationally interchangeable and compatible, regardless of Model.

Both "Block" and "Discrete" systems are available,

providing wide choice of equipment. All CANNON Flite Packs are compatible with past and present CANNON transmitters of other makes. CANNON servos, too, are compatible with other positive-pulse receivers; a plug change may be needed for adaptability.

All CANNON transmitters utilize the new "MAX-POWR" RF circuitry which nominally provides the Max legal output of 750 mw on 72 MHz., placing these among the most powerful R/C transmitters currently available.

Each CANNON R/C System consists of a Transmitter. Receiver (or Receiver-Servo block), receiver Nicad Battery (or dry-battery holder), external Charger (for nicads) and number of Servos required to complete the channel count. As supplied, factory-built systems are operational and require only that batteries be added (or plugged in) to operate.

#### TYPES OF SYSTEMS

BASIC 810 Systems are designed to use dry cells (not supplied) in Transmitter and Receiver (no charger). These may be converted to partial or full nicad operation, if desired.

STANDARD 810 Systems utilize a dry-cell Transmitter, plus receiver Nicads and applicable Charger.

DELUXE Systems (all models) include nickel-cadmium Batteries for both Transmitter and Receiver and applicable Dual Charger.

# NOW-180 DAY WARRANTY ON ALL SYSTEMS!

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CHANNELS

MINI-SPORT SYSTEM (MODEL 810) ONE

CHANNELS

ONE STICK

4 OR 5 CHANNELS

TWO 4 OR 5 STICKS CHANNELS

SINGLE STICK



STICK









CE-4



HOLDER







ITEMS

NICAD RX PACK

SERVOS

INCLUDED WITH SYSTEM

#### BASIC SYSTEM

TRANSMITTER (810T, DRY) ANTENNA (48", 9 SECTIONS) RECEIVER (520R(5)(5)) RX DRY BATTERY HOLDER CE-4 SERVOS (1,2 OR 3) SERVO TRAY(S) INSTRUCTION MANUAL

#### STANDARD SYSTEM

TRANSMITTER (810T, DRY) ANTENNA (48", 9 SECTIONS) RECEIVER (520R(5)(4)) RX NICAD PACK (810-P500) NICAD CHARGER (4CA-810) CE-4 SERVOS (2,3 OR 4) SERVO TRAYS INSTRUCTION MANUAL

#### DELUXE SYSTEM

TRANSMITTER (810T, NICADS) ANTENNA (48", 9 SECTIONS) RECEIVER (520R(5)(4)) RX NICAD PACK (810-P500) DUAL CHARGER (12CA-810) CE-4 SERVOS (2,3 OR 4) SERVO TRAYS INSTRUCTION MANUAL

# MINI-SPORT RADIO CONTROL SYSTEMS

MINI-SPORT Model 810 R/C Systems offer the greatest dollar value of any equipment currently available. Features include:

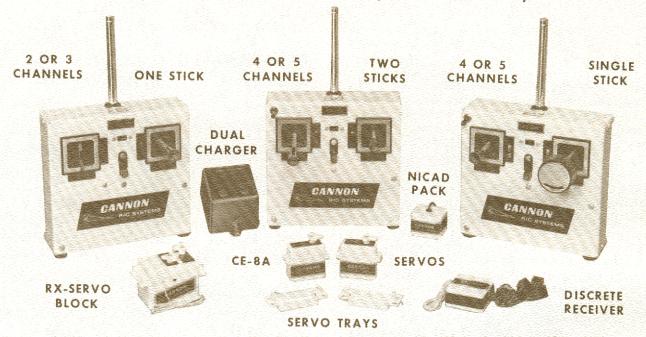
- Hi-impact plastic transmitter case.
- Precision 2-axis open-gimbal sticks and RF meter are standard.
- "MAX-POWR" transmitter RF section.
- BASIC and STANDARD transmitters use 7 AA Alkaline dry cells (not supplied). Convert easily to nicads. Charger available.
- DELUXE transmitter has 500 mah nicads, plus charge receptacle.
- All Tx units expand to 5 channels maximum, even to 3-axis Single Stick!
- Mini receiver (1.15 oz.) incorporates plug block.
   Aileron extension cable available.
- Double-tuned Rx front end, FET RF amplifier and FET Mixer for maximum sensitivity and selectivity.
- BASIC Rx has 4-channel capability; STANDARD and DELUXE System Rx can go to 8 channels.
- Rx dry battery holder supplied with BASIC system;
   Rx nicad pack, 500 mah capacity, and appropriate charger come with other systems.
- "Full-Power" CE-4 servos (1.25 oz.) standard with all systems.
- Mini CE-8A servos (.75 oz.) optional at \$7.50 per servo extra.
- Mini Flite Packs offer smaller 100, 250 or 450 mah batteries.

#### MINI-SPORT SYSTEM PRICES

BASIC SYSTEM		
DESCRIPTION	PART NO.	RETAIL PRICE
2 CH., 2 Servos 3 CH., 3 Servos		2일하다 일하다 하나 없었다면 하나 나는 사람이 없다.
STANDARD SYSTE	<u>M</u>	
DESCRIPTION	PART NO.	RETAIL PRICE
2 CH., 2 Servos 3 CH., 3 Servos 4 CH., 4 Servos 5 CH., 4 Servos	810S- <b>33</b> A 810S-44A	
DELUXE SYSTEM		
DESCRIPTION	PART NO.	RETAIL PRICE
경험하다 하다 하다 하다 하나 살아 살아 있다.	810D-22A	나이아는 얼마나 되었다면 얼마나 나를 하는데 없다.
3 CH., 3 Servos 4 CH., 4 Servos		
5 CH., 4 Servos	810D-54A	259.95

For Single Stick Tx (3-axis, 4 or 5-CH. only) change P/N to S810-, and add \$15.00.

# SUPER-MINI SYSTEM (MODEL 820)



# ITEMS INCLUDED WITH SYSTEM

DELUXE TRANSMITTER (820T)
ANTENNA (48", 9 SECTIONS)
DISCRETE RECEIVER (520R(5)②)
OR
RX-SERVO BLOCK (2 SERVOS)

RX NICAD PACK (820-P100) DUAL CHARGER (12CA-810) CE-8A SERVOS (2,3 OR 4) SERVO TRAYS INSTRUCTION MANUAL

# SUPER-MINI EQUIPMENT

CANNON Super-Mini Proportional Equipment is the SMALLEST AND LIGHTEST IN THE WORLD! No other equipment can compare with it for minimum size, weight and proven performance.

Single channel may be used for extremely tiny aircraft, CO<sub>2</sub> engines, Old Timers and Free Flight Return; one, two or more channels can operate indoor or .010 powered aircraft; four-channel "Full House" is now feasible for .020 and .049 vehicles.

Although the Super-Mini CE-8A servos are extremely small and light, they have adequate power to handle larger aircraft. We suggest 80" gliders as a maximum wingspan, and equipment use on powered aircraft below . 60's. For larger vehicles other CANNON "Full Power" systems are recommended.

These DELUXE Systems offer the <u>World's smallest</u> metal-cased transmitter (2 to 5 channels) with "MAX-POWR" RF section and output meter, Dual Charger for Tx and Rx nicads, and choice of two Flite Packs:

- a. Discrete unit with separate Super-Mini Receiver, individual CE-8A servos, and choice of Rx nicad packs. Most versatile, this arrangement allows operation of one thru five channels.
- b. Super-Mini Dual Block, has receiver and two servos in one unit for minimum weight, simplified installation. Provides 2 thru 5-channel operation with external servos and nicad pack. Four and fivechannel block incorporate a reversing plug which permits rudder, aileron or CAR operation from RH Tx stick.

Systems are available with choice of discrete Rx or Block, any nicad pack, and "Full Power" CE-4 servos instead of CE-8A.

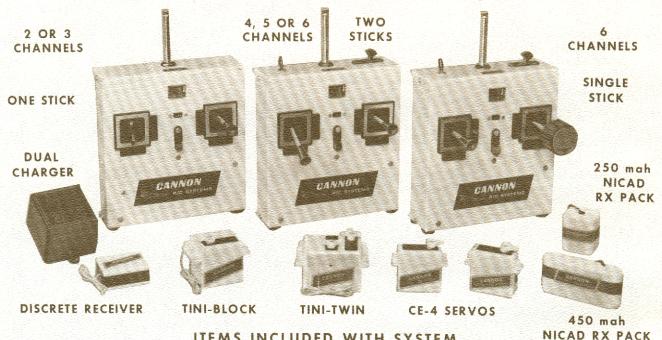
Larger nicad packs are recommended for four or more channels. Weights shown are with 100 mah pack: normal operating time, 2 Ch. - 40 min.; 3 Ch. - 30 min.; 4 Ch. - 20 min. Autocharger is recommended for fast charging 100 mah nicads at the flying site (maximum recharge time - 15 minutes).

#### SUPER-MINI SYSTEM PRICES

ITEM	PART NO. PRICE FLITE PACK WEIGHT
2 CH., 1 Servo	820-21A( ) <b>\$184.95</b> 2.6 Oz.
2 CH., 2 Servos	820-22A( ) <b>199.95</b> 3.2 Oz.
3 CH., 3 Servos	(90.7 gr.) 820-33A() <b>249.95</b> 4.2 Oz. (116.2 gr.)
4 CH., 4 Servos	820-44A( ) <b>299.95</b> 5.0 Oz.
5 CH., 4 Servos	820-54A() <b>309.95</b> (141.7 gr.) 5.0 Oz. (141.7 gr.)

Discrete and Block systems, same price. When ordering, add (D) (Discrete) or (SMB) (Super-Mini Block) in parenthesis after Part No. For Single Stick Tx (3-axis, 4 or 5-Ch. only) change P/N to S820-, and add \$15.00. See page 24 for additional ordering information.

# TINI SYSTEMS (MODEL 825)



ITEMS INCLUDED WITH SYSTEM

DELUXE TRANSMITTER (825T) ANTENNA (48", 9 SECTIONS) DISCRETE RECEIVER (520R(5)) OR TINI-BLOCK (RX, 1 SERVO) OR TINI-TWIN (RX, 2-SERVOS)

CE-4 SERVOS RX NICAD PACK (825-P250) DUAL CHARGER (12CA-810) SERVO TRAYS INSTRUCTION MANUAL

# 'FULL POWER' TINI SERIES EQUIPMENT

CANNON Tini R/C Systems are small and light enough for aircraft down to 16" wingspan, yet the "Full-Power" CE-4 servos have plenty of muscle for the largest gliders as well as powered aircraft to .80 size, or greater.

Three Tini units are offered for '78. The TINI-BLOCK contains a receiver and one servo in the block. The TINI-TWIN block includes Rx and two integral servos. The new TINI-MITE is an extremely small discrete receiver used with individual servos. All three systems are available in 2 thru 6 channels, external servos completing the Block-channel count. Reversing plug feature on TINI-TWIN same as on Super-Mini Block. Prices are the same for all Tini Systems with the same number of channels.

These DELUXE Tini Systems have an ultra-small metal-cased transmitter, with meter. The transmitter meter indicates battery condition and RF output. The new CANNON "MAX-POWR" RF circuit is used in these transmitters. All systems are wired and tested, ready to plug together and use.

## TINI SERIES SYSTEM PRICES

ITEM	PART NO.	PRICE
2 CH., 1 Servo	825-21A( )	\$174.95
2 CH., 2 Servos	825-22A( )	189.95
3 CH., 3 Servos	825-33A( )	224.95

ITEM	PART NO.	PRICE
4 CH., 4 Servos	825-44A( )	\$269.95
5 CH., 4 Servos	825-54A( )	279.95
6 CH., 4 Servos	825-64A( )	284.95

To identify System desired, when ordering please add (TB) (Tini-Block), (TT) (Tini-Twin) or (TM) (Tini-Mite) in parenthesis after Part No. For Single Stick Tx (3-axis, 6-Ch. only) change P/N to S825 - 64(), and add \$15.00. See page 24 for additional ordering information.

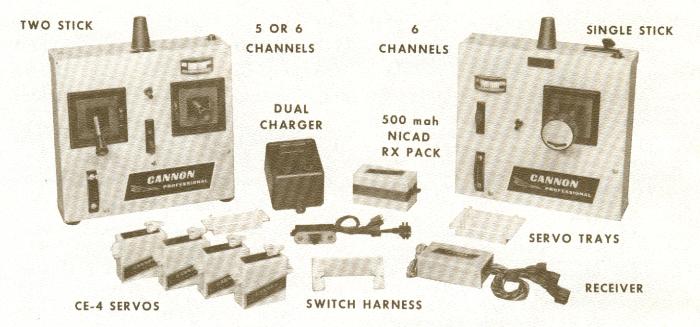
#### FLITE PACK WEIGHTS

ITEM	TINI-	TINI-	TINI-
	BLOCK	TWIN	MITE
2 CH., 1 Servo	3.9 Oz.	N. A.	4. 1 Oz.
2 CH., 2 Servos	5.1 Oz.	5. 0 Oz.	5. 3 Oz.
3 CH., 3 Servos	6.4 Oz.	6.3 Oz.	6.6 Oz.
4 CH., 4 Servos	7.6 Oz.	7.5 Oz.	7.9 Oz.

Standard Rx nicad pack is 250 mah, unless specified otherwise. Any other CANNON battery pack (except GP540-P500) is optional at no extra cost.

Regardless of the number of channels originally purchased, all Tini Systems can be expanded at the Factory up to a full 6 channels, at minimum cost. If desired, equipment can even be changed, modified or upgraded to include a 3-axis Single Stick.

# PROFESSIONAL SYSTEM (MODEL 830)



#### ITEMS INCLUDED WITH SYSTEM

"MAX-POWR" TRANSMITTER (830T) ANTENNA (48", 9 SECTIONS) RECEIVER (540R(6)) SWITCH HARNESS WITH EXTERNAL CHARGE RECEPTACLE (CE-SWCR)

RX NICAD PACK (830-P500) DUAL CHARGER (12CA-840) FOUR CE-4 SERVOS SERVO TRAYS INSTRUCTION MANUAL

# PROFESSIONAL R/C SYSTEM

CANNON Professional Systems for 1978 are offered with 5 or 6 channel Two-Stick transmitters, or 6-channel Single Stick (3-axis) transmitters. The first four channels are basic flight controls; the last serve as retract landing gear and/or auxiliary controls.

A vinyl-clad aluminum case houses the transmitter, which features Dunham precision open-gimbal sticks, output meter, 500 mah 9.6V nicad batteries and "MAX-POWR" interchangeable RF section.

The separate RF unit utilizes plug-in crystals for easy frequency change-over within the same band. Conversion to another band requires only a few minutes to unplug and replace the entire RF section with a pretuned unit on the desired frequency.

A Buddy Box Circuit is standard in the Professional Transmitter, permitting flight trainer operation of two similarly equipped CANNON transmitters. One interconnecting cable (BBC-A), available separately, makes one transmitter an Instructor Unit, the other a Student Control Box.

The Professional Receiver, contained in a metal case, employs a double-tuned, dual-FET circuit for optimum selectivity. Filter circuits are added for maximum noise rejection. A C-MOS I.C. decoder provides 8-channel capability at extremely low current drain.

Professional system components are listed on the opposite page. However, the CE-5 is an alternate servo choice, and any other CANNON Rx nicad pack (except GP840-P500) may be selected with the Professional System.

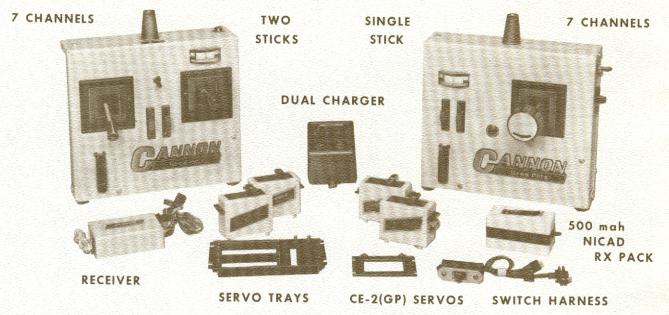
Professional System Kits, with complete instructions, are available for both Systems and Flite Packs. When finished, Kits are identical to Factory-built systems. Kits are warranted only for completeness of parts.

## PROFESSIONAL SYSTEM PRICES

ITEM	ASSEMBLED	KIT
5 CH., 3 Servos	\$259.95 (830-53A)	\$209.95 (830-53K)
5 CH., 4 Servos	<b>\$279.95</b> (830-54A)	\$224.95 (830-54K)
6 CH., 3 Servos	\$279.95 (830-63A)	\$224.95 (830-63K)
6 CH., 4 Servos	\$299.95 (830-64A)	\$239.95 (830-64K)

For Single Stick Tx (3-axis, 6-Ch. only), change P/N to S830 -, and add \$15.00. See page 24 for additional ordering information. Airborne weight (250 mah pack) ... 8.9 oz. (252 grams).

# **GRAN PRIX SYSTEM (MODEL 840)**



## ITEMS INCLUDED WITH SYSTEM

"MAX-POWR" TRANSMITTER (840T)
ANTENNA (48", 9 SECTIONS)
RECEIVER (540R(5)GP)
SWITCH HARNESS, WITH EXTERNAL
CHARGE RECEPTACLE (CE-SWCR)

RX NICAD PACK (GP840-P500) DUAL CHARGER (12CA-840) FOUR CE-2(GP) SUPER-SERVOS SERVO TRAY SET INSTRUCTION MANUAL

# CUSTOM-BUILT GRAN PRIX SYSTEM

Truly outstanding equipment, the CANNON Gran Prix offers a Custom Built System at competitive production prices. Unit is available with 7 channels, Two-stick or Single Stick (3-axis) transmitter. As always, the Gran Prix receives meticulous care in construction, checkout and testing. Each new system is actually test flown for a minimum of 30 minutes in the air! Equipment is shipped only after test flying has proven it flawless.

Only a few of the major system features can be described herein: These include a 1978 vinyl-clad, metal-cased transmitter with a new interchangeable "MAX-POWR" RF section nominally providing maximum legal power of 750 mw on 72 MHz, Dunham precision open-gimbal sticks, full seven command channels including four basic flight controls plus landing gear and two auxiliary channels, and new Hi-Capacity nicads with diode protection across all cells. A RF-battery meter permits monitoring of both functions.

For optimum sensitivity and selectivity, the four-I. F. receiver incorporates both a FET RF amplifier and a FET mixer. Extra noise rejection circuitry in the receiver practically eliminates external noise effects. Use of an 8-bit C-MOS decoder keeps current drain to a minimum. This superb receiver is housed in an aluminum, vinyl-clad case.

Special Super-Amplifiers are used in the CE-2(GP) servos. Six external driver transistors following a conventional I.C. amplifier provide greater drive, extra speed and more precise centering.

Buddy Box Circuitry is also standard in the Gran Prix transmitter. (See Professional Model for description.)

In short, the Gran Prix contains every basic feature the most discriminating R/C Modeler could want. Plus a no-nonsense 1 YEAR WARRANTY - everything is covered except crash damage and at NO ADDITIONAL COST.

Although specific items such as CE-2(GP) Super-Servos, GP840-P500 Nicad Pack, etc. are shown as standard equipment with the Gran Prix System, any other similar item may be specified with your System at no price difference. Thus, any CANNON Servo, Receiver, Battery Pack or Flite Pack can be obtained with the System. Full year Warranty still applies, and units will receive the same care normally accorded a Gran Prix, including test flying.

### GRAN PRIX SYSTEM PRICES

ITEM	PART NO.	PRICE
7 CH., Two-Stick	840-74A	\$399.95
7 CH., Single Stick	S840-74A	\$414.95

Prices are for any standard 27 or 72 MHz. frequency. For 29, 35, 40 or 53 MHz., add \$15.00 to System price.

# FLITE PACKS

CANNON Flite Packs consist of those items which install in the vehicle, namely: Receiver (or Receiver-Servo Block), Rx Battery Pack, and Servo(s). No charger is included; most modelers already have a suitable charger.

Flite Packs are compatible with all CANNON transmitters, past and present, and most current transmitters of other makes. For optimum performance, Flite Pack Rx MUST be peak-tuned to the matching Tx, either at the CANNON factory (no extra charge at time of purchase), or by a competent technician (tuning instructions supplied).

All Flite Pack weights are not shown because of the variety of possible combinations. Select the components you desire, then add individual unit weights to obtain total flying weight.

## MINI-SPORT FLITE PACKS (810)

ITEM	PART NO.	PRICE
2 CH., 2 Servos	810FP-22A	\$109.95
3 CH., 3 Servos	810FP-33A	134.95
4 CH., 4 Servos	810FP-44A	159.95
4 CH., 4 Servos	810FP-44A	159.9

Deduct \$15.00 for one CE-4 servo omitted.

# SUPER-MINI FLITE PACKS (820)

ITEM	PART NO.	PRICE
2 CH., 2 Servos	820FP-22A	\$139.95
3 CH., 3 Servos	820FP-33A	172.50

4 CH., 4 Servos 820FP-44A \$204.95

Deduct \$20.00 for one CE-8A servo omitted.

## TINI SERIES FLITE PACKS (825)

ITEM	PART NO.	PRICE
2 CH., 2 Servos	825FP-22A	\$119.95
3 CH., 3 Servos	825FP-33A	144.95
4 CH., 4 Servos	825FP-44A	169.95

Deduct \$15.00 for one CE-4 servo omitted.

## PROFESSIONAL FLITE PACKS (830)

ITEM	KIT	ASSEMBLED
5 CH., 4 Servos	\$174.95 (830FP-54K)	\$204.95 (830FP-54A)
6 CH., 4 Servos	\$184.95 (830FP-64K)	\$214.95 (830FP-64A)

Deduct \$15.00 for one CE-4 servo omitted.

# GRAN PRIX FLITE PACKS (840)

ITEM	PART NO.	PRICE	
7 CH., 4 Servos	840FP-74A	\$249.95	

Choice of servos or battery packs. If other units are omitted from Flite Pack, calculate price on basis of individual components. Add \$10.00 to Flite Packs for 29, 35, 40 or 53 MHz. Add \$5.00 for extra channel cable. Inquire on prices not shown.

## **TRANSMITTERS**

Refer to System photos for physical appearance of specific transmitters. All units are factory assembled (except Kits) with new "MAX-POWR" RF Section providing nominal 750 mw max. output on 72 MHz. Precision open-gimbal Two-axis sticks are used on all Tx, except Single Stick models use 3-axis open stick. Two-channel units employ one 2-axis stick; a proportional lever is added for 3 channels: two 2-axis sticks make up four channels, while a landing gear retract switch is added for the 5th channel; Aux levers make up additional channels. Two-stick transmitters of 4 channels or more are available as Mode I (Throttle Right) or Mode II (Throttle Left). Please specify "TR" or "TL" when ordering. Tx prices shown are for 27 or 72 MHz. Add \$10.00 for 29, 35, 40, or 53 MHz.

#### MODEL 810 (MINI-SPORT)

TYPE	CHANNELS	PART NO.	PRICE
BASIC TX	2	810T(B2)A	\$59.95
(Dry)	3	810T(B3)A	69.95
DELUXE TX (2-axis stks, 500 mah nicads)	[2	810T(D2)A	79.95
	3	810T(D3)A	89.95
	4	810T(D4)A	99.95
	<b>\</b> 5	810T(D5)A	109.95
Single Stick (3-axis)	$\int 4$	S810T(D4)A	114.95
	<b>\</b> 5	S810T(D5)A	119.95

Plastic Tx case measures  $1-23/43 \times 4-27/32 \times 5-11/32$ " (43.5 x 123 x 136 mm).

#### MODEL 820 (SUPER-MINI)

TYPE	CHANNELS	PART NO.	PRICE
DELUXE TX (2-axis stks)	[2	820T(D2)A	\$89.95
	3	820T(D3)A	99.95
	4	820T(D4)A	109.95
	<b>\</b> 5	820T(D5)A	119.95
Single Stick (3-axis)	$\int 4$	S820T(D4)A	124.95
	<b>\</b> 5	S820T(D5)A	129.95

Tx are World's Smallest, vinyl-clad metal case,  $1-5/8 \times 5-1/16 \times 5-9/32$ " (41.5 x 128.5 x 134 mm).

#### MODEL 825 (TINI SERIES)

TYPE	CHANNELS	PART NO.	PRICE
DELUXE TX	[2	825T(D2)A	\$89.95
(2-axis stks, 500 mah	3	825T(D3)A	99.95
nicads)	4	825T(D4)A	109.95
	5	825T(D5)A	119.95
	6	825T(D6)A	129.95
Single Stick (3-axis)	{6	S825T(D6)A	144.95

Transmitters have vinyl-clad metal case, size  $1-11/16 \times 5-23/32 \times 6-1/16$ " (43 x 145 x 154 mm).

#### TRANSMITTERS (CONT.)

#### MODEL 830 (PROFESSIONAL)

TYPE	CHANNELS	PART NO.	PRICE
DELUXE TX	[5 (2 stick)	830T(D5)A	\$129.95
(assembled)	6 (2 stick)	830T(D6)A	139.95
	6 (Single Stk)	S830T(D6)A	154.95
	[5 (2 stick)	830T(D5)K	104.95
TX Kits	6 (2 stick)	830T(D6)K	114.95
	6 (Single Stk)	S830T(D6)K	129.95

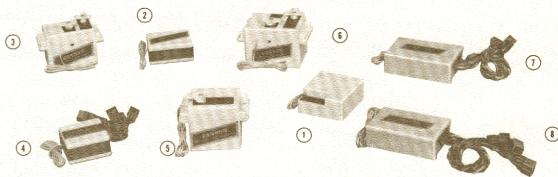
830 transmitters have vinyl-clad metal case, size 1-27/32 x 6-5/32 x 6-1/2" (47 x 155 x 164.5 mm).

#### MODEL 840 (GRAN PRIX)

CHANNELS	PART NO.	PRICE
7 (2 Stick)	840T(D7)A	\$159.95
7 (Single Stk)	S840T(D7)A	174.95

Both transmitters include diode-protected 500 mah nicads and vinyl-clad metal case, size  $1-7/8 \times 6-1/16 \times 6-3/4$ " (47.5 x 153.5 x 171 mm).

# RECEIVERS



General Specifications are applicable to all Rx unless noted. SENSITIVITY: 4 to 6 microvolts nominal. SELECTIVITY: ±4 KHz at 6 db. IMAGE REJECTION: -3 db. TEMPERATURE RANGE: 0 to 140°F. CURRENT DRAIN: 8 ma. CIRCUITRY: Double-tuned voltage-regulated front end, FET RF amplifier, FET Mixer, dual AGC for optimum sensitivity and selectivity. DECODER: C-MOS shift register, 8-channel capability, positive output.

Rx cases are hi-impact nylon, except aluminum cases on Professional and Gran Prix units. Dean's 3-pin plugs are standard. Add \$1.75 per plug for Multicon (not available on 810 Rx). "Pic" numbers refer to Rx illustration. All units are factory assembled except Professional Kits. All Rx are single deck, including decoder. Rx prices are for 27 or 72 MHz. Add \$10.00 for other frequencies. See pages 16 and 17 for outline drawings.

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#### RECEIVERS (CONT.)

#### 810 MINI-SPORT RECEIVERS

TYPE	CHANNELS	PART NO.	ASSEMBLED
BASIC Rx	[2	520R(5) (5) -2A	\$48.95
Pic 1	1 3	520R(5) (5) -3A	49.95
DELUXE Rx	[2	520R(5) 4 -2A	53.95
Pic ①	3	520R(5) 4 -3A	54.95
	4	520R(5) 4 -4A	55.95
	1 5	520R(5) 4 -5A	57.95

BASIC Rx has Dual J-K Flip-Flop decoder, max. channels - 4, current drain 20 ma; DELUXE Rx uses C-MOS decoder, 8-channel capability, 8 ma. current drain.

#### 820 SUPER-MINI RECEIVERS

TYPE	CHANNELS	PART NO.	ASSEMBLED
SUPER-MINI	[2	520R(5)-2(SM)	\$67.50
Discrete Rx	3	520R(5)-3(SM)	69.50
Pic 2	4	520R(5)-4(SM)	72.50
	1 5	520R(5)-5(SM)	74.50
SUPER-MINI	[2	520R(5)-2(SMB)	124.95
BLOCK	3	520R(5)-3(SMB)	129.95
Pic 3	4	520R(5)-4(SMB)	139.95
	15	520R(5)-5(SMB)	144.95

#### 825 TINI SERIES RECEIVERS

TYPE	CHANNELS	PART NO.	ASSEMBLED
TINI-MITE	[2	520R(5)-2(TM)	\$60.95
Discrete Rx	3	520R(5)-3(TM)	62.95
Pic 4	4	520R(5)-4(TM)	64.95
	5	520R(5)-5(TM)	66.95
	16	520R(5)-6(TM)	68.95

TYPE	CHANNELS	PART NO.	ASSEMBLED
TINI-BLOCK	ſ2	520R(5)-2(TB)	\$79.95
(Rx and	3	520R(5)-3(TB)	84.95
1 Servo	4	520R(5)-4(TB)	89.95
in Block	5	520R(5)-5(TB)	94.95
Pic (5)	L6	520R(5)-6(TB)	99.95
TINI-TWIN	[2	520R(5)-2(TT)	99.95
(Rx and	3	520R(5)-3(TT)	104.95
2 Servos	4	520R(5)-4(TT)	114.95
in Block)	5	520R(5)-5(TT)	119.95
Pic 6	6	520R(5)-6(TT)	124.95

#### 830 PROFESSIONAL RECEIVERS

TYPE	CHANNELS	PART NO.	PRICE
Pic (7)	5 (Assembled)	540R(6)-5A	\$71.95
	6 (Assembled)	540R(6)-6A	74.95
	5 (Kit)	540R(6)-5K	59.95
	6 (Kit)	540R(6)-6K	61.95

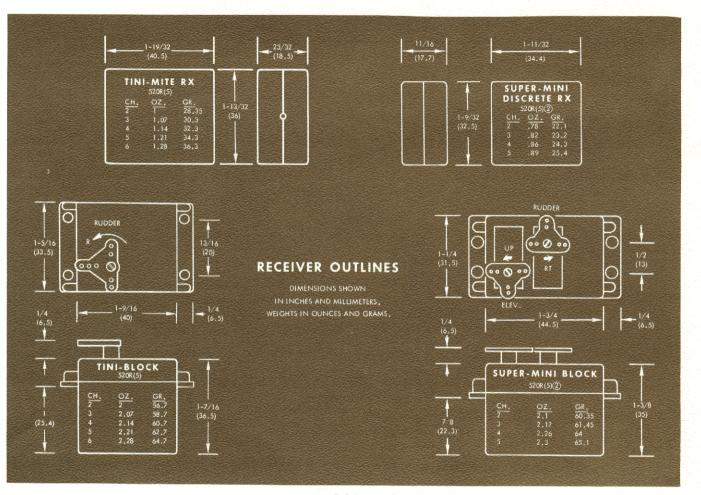
Rx has added noise filtering, plus metal case. Kits are complete with case, RF section, Decoder, Dean's plugs, wiring and instructions.

#### 840 GRAN PRIX RECEIVER

TYPE	CHANNELS	PART NO.	ASSEMBLED	
Pic 8	7	540R(5)GP	\$84.95	

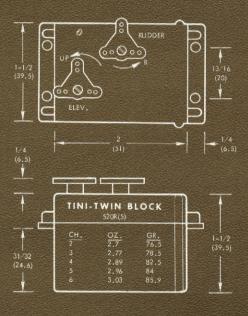
Rx Sensitivity: 3 microvolts. Selectivity: 3 KHz. at 6 db. Triple AGC plus added noise rejection circuits; transistor voltage regulation on front end.

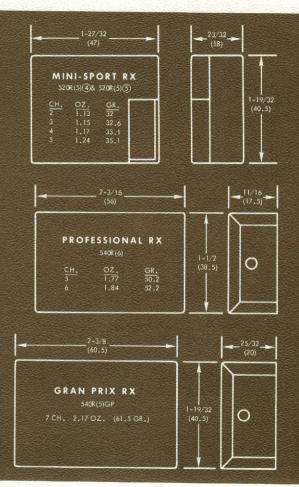
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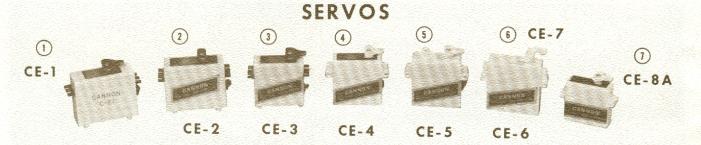


#### RECEIVER OUTLINES

DIMENSIONS SHOWN
IN INCHES AND MILLIMETERS,
WEIGHTS IN OUNCES AND GRAMS.







CANNON Servos are compatible with all CANNON 3-wire receivers, and most positive pulse receivers of other makes. Dean's 3-pin plugs are standard, Multicon available on special order. Other plug types to be supplied by customer.

#### COMPLETE SERVOS

NO.	PART NO.	TYPE	KIT	ASSEMBLED
1	CE-1	Rotary	Not ava	ilable
2	CE-2(Std)	Rotary	\$23.95	\$29.95
2	CE-2 (GP)	Rotary	26.95	32.95
3	CE-3	Mini-Rotary	22.95	28.95
(4)	CE-4	Mini-Rotary	22.95	28.95
(5)	CE-5	Rotary-Linear	23.95	29.95
6	CE-6	180° Rotary	23.95	29.95
6	CE-7	Hi-Pwr. Rotary	23.95	29.95
(7)	CE-8A	Super-Mini	27.50	32.50

Centering accuracy, all servos 0.5%. Static current drain 6-8 ma. Order by Part No., plug type, Kit or Assembled. All servos I.C. type, 3-wires. Kits include Dean's plug and wiring. Add \$1.75 for Multicon plug. Negative pulse servos available on special order.

#### SERVO SPECIFICATIONS

SERVO TYPE	WEI OZ.	GHT GR.	THRUST (LBS.)	TRANSIT TIME (SEC.)
CE-2(Std) CE-2(GP) CE-3 CE-4 CE-5 CE-6 CE-7	1. 4 1. 48 1. 25 1. 25 1. 25 1. 31 1. 31	39.7 42 35.4 35.4 35.4 37.1 37.1	3. 5 4. 0+ 3. 5 4. 0 3. 5 7-8 7-8	0.5 0.3 0.5 0.5 0.6 1.0
CE-8A	. 75	21.3	2.5-3	0.6

#### SERVO ELECTRONICS

FOR SERVO	KIT	ASSEMBLED
CE-2(STD)	\$12.00	\$18.00
CE-2(GP)	14.50	20.50
CE-3, -4, -5, -7	12.00	18.00
CE-6	12.95	18.95
CE-8A	14.50	20.50

Dean's plug included, no pot or motor. Add \$1.75 for Multicon plug.

#### SERVO MECHANICS

SERVO	PRICE
CE-2	\$15.00
CE-3, CE-4	14.00
CE-5	15.00
CE-6, CE-7 *CE-8A	15.00
CE-OA	22.00

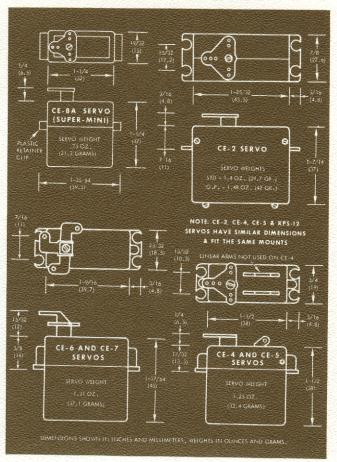
16 mm motors used on all servos except CE-8A. 8 ohm motor and 5K pot included with mechanics. Please specify other pot resistance or motor type desired. Deduct \$6.00 from above prices (except CE-8A) if pot and motor not required. \*12 mm Japanese motor (black) and 5K pot included. Older servos use Swiss motor (silver) and 1.5K pot. Please specify combination required. CE-8A mechanics alone - \$9.00.

#### SERVO PARTS

ITEM	PRICE
3 ohm, 16 mm motor	\$ 8.95
8 ohm, 16 mm motor	8,95
8 ohm, 12 mm Swiss motor (silver)	15.00
12 ohm, 12 mm Japanese motor (blk)	12.00
Servo gears (1 thru 5)	.60 ea.
Output gear	.85 ea.
Servo gear sets (4 gears)	2.50
Servo gear sets (6 gears)	3.25
Servo output arms	. 50 ea.
Servo pots, 1.5K or 5K	2.00 ea.
Pot wipers	.50 ea.
Mounting grommets	, 10 ea,

When ordering, please specify servo type and give complete description of parts desired. Write for prices on other parts.

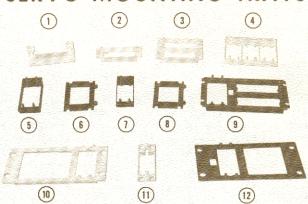
#### SERVO DIMENSIONS



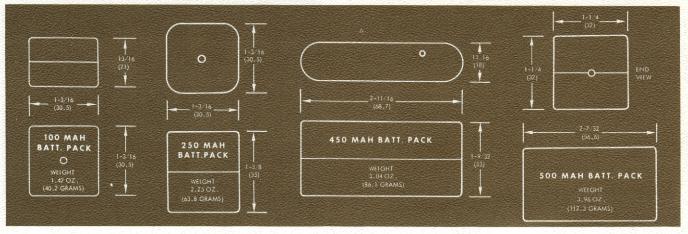
ITEM	DESCRIPTION	PART NO.	PRICE
(1)	Horiz, mount for 1 CE-4	CE-4H	\$1.49
(2)	Vert. mount for 1 CE-4	CE-4V	1.49
<u>3</u>	2 CE-4, S by S	S4M-2	2.75
( <u>4</u> )	3 CE-4, S by S	S4M-3	2.75
(5)	Vert, mount for 1 CE-2	CE-2V	1.59
(6)	Horiz, mount for 1 CE-2	CE-2H	1.59
7	Vert. mount for 1 CE-2	CE-3V	1.59
8	Horiz, mount for 1 CE-3	CE-3H	1.59
9	2 CE-2, S by S, 1 across	CE-2M	3. 19
(10)	Tini-Twin plus 1 CE-4	TT-3	3.00
(11)	Vert. mount for 1 CE-8	CE-8V	1.49
(12)	2 CE-4, S by S, 1 across	S12M-2	3. 19
N/S	Set of CE-4 trays (5 pieces)	CE-4T	4.95

CE-3, CE-4, CE-5 and KPS-12 servos fit all CE-4 trays.

# SERVO MOUNTING TRAYS



#### RECEIVER BATTERY DIMENSIONS



# NICKEL-CADMIUM RECEIVER BATTERIES

1











100 mah

225 mah

250 mah

450 mah

All CANNON nicad packs are designed for normal mah charge rate up to 1/3 cell capacity. Standard 50 ma chargers may be used for any pack (even 100 mah pack with charge limiter).

NO.	PART NO.	TYPE	KIT	ASSMBL'I
1	820-P100	100 ma, no sw.	\$12.50	\$16.50
1	*S820-P100	same, sml sw.	13.00	17.50
3	825-P250	250 ma, no sw.	12.50	16.50
3	*S825-P250	same, sml sw.	13.00	17.50
4	825-P450	450 ma, no sw.	12.50	16.50

NO. PART NO. TYPE KIT ASSMBL'D

(4) \*S825-P450 same, sml sw. \$13.00 \$17.50

(5) 830-P500 500 ma, no sw. 12.50 16.50

(5) GP840-P500 same, w/diodes 14.00 18.50 (5) \*S830-P500 500 ma, lge sw. 14.00 18.50

\*Add \$2.00 for external charge receptacle, if desired. Standard plug is 3-pin female Dean's. Add \$1.75 for Multicon substitute. Item ② (225 mah) no longer available. Charge limiter for 100 mah pack - \$2.95.

# NICAD CHARGERS

	이어가 많아 안 없었다. 아이는 아이는 아이는 얼마나 있다. 아이는	
1	4-Cell w/Dean's 3-pin plug (4CA-810)	\$9.50
2	Auto Charger for 100 ma pack (AC-100)	8.95
3	Dual charger, Tx & Rx batteries,	
	chge indicators, Dean's chge plug	
	& 3-pin Dean's plug (12CA-810)	12.50
(3)	Same, with 6-pin Tx plug & Dean's	
	3-pin plug (12CA-550)	12.50
(3)	Same, with 6-pin Tx plug & Dean's	
	chge. plug (12CA-840)	12.50







#### ITEM PLUGS AND CABLES DESCRIPTION PART NO. PRICE Ext. chge. recept., plug ECR \$1.75 Same, wires ECR-W 2.25 Batt. cable, sml sw. BC-SS 2.50 Batt. cable, no sw. BC-OS 1.75 Batt. cable, noble sw. BC-NS 3.50 Sw. harness, w recept. CE-SWCR 6.50 N/S Sw. harness, w/o recept, CE-SW 4,50 6 Dean's ail. ext. cable D-AEC 2.50 N/S Dean's 3-pin male D3M .75 N/S or female plug D3F .75 N/S Buddy box cable (kit) 5.00 BBC-K N/S Same, assembled BBC-A 8.00 N/S Servo cable, male plug SC26-3M 1.85 N/S Rx cable, female plug RC26-3F 1.85 N/S Multicon servo cable MCS-4 2.25 N/S Multicon female Rx cable MCP-4 2.25 N/S Multicon batt. cable MCS-3 2.25 N/S Multicon ail, ext, cable M-AEC 3.00

# MISCELLANEOUS FITTINGS

ITEM	DESCRIPTION	PART NO.	PRICE	$\bigcirc$	(2)	(3)		(5)	<b>6</b>	
1	Tx Switch, DPDT	T-DPDT	\$ .95	· ·	O	•	•	©		
2	Sw. guard for (1)	SG-DPDT	. 85	-	450	6 100				
3	Noble switch, 4PDT	NS-4PDT	1.75	1.4	M					
4	Sw. cover for (3)	SC-4PDT	. 60	The state of the s						
5	Sw. guard for (3)	SG-4PDT	. 85							
6	Sw. protector for (3)	SP-4PDT	1.00							
7	Submin. sw., DPDT	SS-DPDT	. 75							
8	Switch lock	WE-SL	. 40			40				
9	Buddy Box P.B. sw.	BB-SPDT	3.00				当事主		2557	
10	L.G. sw., SPDT	LG-SPDT	3.75				V			
11	Male plug, 6 pin	STEK-6	2.00		0		_		_	
12	Matching receptacle	MEB-6	1.35	Û	(8)	(9)	(10)	(11)	(12)	

# GENERAL INFORMATION

## FREQUENCIES AVAILABLE

CANNON equipment for 1978 is available on the following frequencies:

BAND	SPECIFIC FREQUENCIES
A-27	MHz: 26.995, 27.045, 27.095, 27.145, 27.195.
B-29	MHz: 29.745, 29.785, 29.825, 29.865, 29.905, 29.945, 29.985.
C-35	MHz: 35.010, 35.040, 35.070, 35.100, 35.130, 35.160, 35.190.
D-40	MHz: 40.665, 40.675, 40,685, 40.695.
E-53	MHz: 53.1, 53.2, 53.3, 53.4, 53.5.
F-72	MHz: *72.080, 72.160, *72.240, 72.320, *72.400, 72.960, *75.640.
G-72	MHz: 72.720, 72.760, 72.800, 72.840 (Canada).
	Model aircraft use only.

Bands A, E & F legal for operation in U.S.A. FCC Class "C" license required for A & F; Band E requires Amateur License. Except for 75.640 MHz, bands F and G legal in Canada.

#### ADDING CHANNELS

Factory cost of adding channels is based on retail price DIFFERENCE of system BEFORE and AFTER conversion, plus \$10.00 for labor. Add to this shipping, handling and any repair costs. Added servo(s) for new channel count are included. Conversion costs of individual Tx or Rx are based on current hourly repair charge, plus parts, shipping and handling.

#### CHARGERS

System chargers supplied are 110V, Dual 220V chargers are available for \$5.00 extra. Please specify.

#### INTERMIXING COMPONENTS

Since CANNON Equipment is built to order, Systems or Flite Packs can be ordered in any combination desired. To compute retail price of new selection, start with the system nearest your needs. Then add (or subtract) the individual retail price DIFFERENCE between the units interchanged to (or from) the price of the original system selected.

# OTHER PARTS

		IARIS
Tx Antenna (Specify O. D. & length)	11. 00 2. 00	Block Cases, 2 parts (Specify type)       Tini-Block \$4.00 Tini-Twin \$5.00         Super-Mini 6.00         Crystals, Tx or Rx (Specify Tx type)         27 MHz (Tx is 3rd overtone) 6.50         29, 35, 40 MHz (Tx is 3rd overtone) 7.50         53, 72 MHz (Doubler or 5th overtone) 8.50
것이 계속하는 보통하는 하는 것이 되었다. 그 모든 동안된 바로 하면요요. 그렇게 되었다. 그 사람들은 사람들이 되었다. 그리고 있다는 사람들이 없는 것이다.		

Send Self Addressed Stamped Envelope for more complete Parts Price List.

## HOW TO ORDER

#### WHEN ORDERING, PLEASE SPECIFY:

Equip. Descrip. Tx Type Servo Type
Part No. Stick Mode No. of Servos
No. of Channels Rx Type Battery Capacity
Frequency Plug Type Retail Price

a. Prices are based on 27 or 72 MHz., two-axis Tx sticks, and standard serve type shown.

 b. Compute price variations from standard Systems or Flite Packs as follows:

1. Add \$15.00 to System retail prices, or \$10.00 to Flite Packs, Tx, or Rx for 29, 35, 40 or 53 MHz.

 For omission of <u>one</u> CE-4 servo, deduct \$15.00; for <u>one</u> CE-8A, deduct \$20.00. Otherwise, calculate total price on costs of individual components.

#### SHIPPING AND HANDLING COSTS

In Continental U.S.A., add following amounts to order: Systems - \$4.00, \*Flite Packs - \$2.50; Transmitter - \$2.50; Rx or Servos - \$2.00; Small Parts - \$1.00; Schematics - \$1.00.

\*When Tx is included, use System cost.

#### PAYMENT TERMS

Except Open Accounts, send Cashier's Check, Money Order or check for full amount. (Allow 3 weeks for personal or business checks to clear.)

#### DEPOSITS

Unless paid in advance, or Customer is Open Account, a 20% deposit is required to initiate an order. When equipment is ready, customer will be advised of balance due, or shipment may be C.O.D.

#### C.O.D. ORDERS

Accepted only with 20% deposit, in advance.

#### RETAIL ORDERS

Order directly from Factory if your dealer does not stock CANNON equipment. Discounts available to any legitimate Hobby Dealer. Calif. Retail Purchasers add Sales Tax.

#### PRO-FORMA INVOICES

Invoices thus marked indicate advance payment is required before shipment will be made.

#### ORDER CANCELLATION OR RETURN

All CANNON Equipment is built to order; a 15% restocking charge is made for cancellation or return. Charges are for checking and/or repackaging equipment for resale.

#### SCHEMATICS

Available for all CANNON Systems at \$3.50, plus \$1.00 S&H (U.S.A.) or \$3.00 (Foreign). No C.O.D.'s. Specify in detail: Equipment type, year, channels, frequency, Tx & Rx types, servo type, battery type and size, 3 or 4 wires, etc.

#### DELIVERIES

Unless specified, shipment is UPS Blue Label. Component parts are usually shelf items for immediate delivery within 48 hours. Systems and Flite Packs, being Special Order, require somewhat longer. Notification will be made in case of excessive delays.

#### TELEPHONE ORDERS

Accepted only to expedite scheduling; written confirmation and payment must follow before shipment. We accept no responsibility for verbal misunderstandings.

# LIMITED WARRANTY

FACTORY-BUILT CANNON SYSTEMS AND FLITE PACKS, SERIAL NUMBER 5300 AND SUBSEQUENT, ARE WARRANTED TO THE ORIGINAL PURCHASER TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF 180 DAYS FROM DATE OF PURCHASE (GRAN PRIX SYSTEM IS 1 YEAR).

Warranty is not applicable to Kits, or to damage or defects in Factory-built equipment resulting from abuse, misuse, incorrect battery polarity, abnormal operation or crash damage. Warranty does not cover incidental or consequential damages resulting from or caused by equipment failure or a defect in material or workmanship. This Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Liability under this Warranty is limited to repair or replacement, without charge, of the defect or defective part at the Factory or Factory Authorized Warranty Station. Shipping and handling charges are extra, as are other repairs. Any modification, alteration, tampering or attempted unauthorized repair of a CANNON System or unit automatically voids the Warranty.

A valid Warranty is contingent upon customer returning the registration card within 10 days of purchase date. Cards must be on file in the name of the individual to whom sold.

CANNON R/C SYSTEMS, or their representatives, assume no liability or responsibility for loss or damage incurred or inflicted during operation of R/C equipment or related devices.

# REPAIR SERVICE

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#### AUTHORIZED SERVICE CENTERS

A list of CANNON Authorized Service Centers is included with your new system or repair, or is available upon request when accompanied by a self-addressed stamped envelope. Please utilize the Center nearest you whenever possible. Both Factory and Service Centers have test equipment, parts and technical information on hand to assure proper service.

Service Centers are privately owned and operated. CANNON R/C SYSTEMS assumes no liability or responsibility for charges or services performed by these Centers.

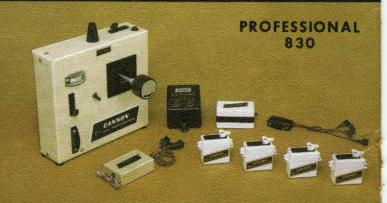
#### WARRANTY REPAIRS

All Warranty Repairs to CANNON Equipment are performed at the Factory in North Hollywood, California to provide full control over possible production problems which could occur.









# CANNON ELECTRONICS, INC.

13400-26 Saticoy Street North Hollywood, Calif. 91605

(213) 764-1488 WORLD'S LEADING MANUFACTURER
OF
SUPERLIGHT DIGITAL R/C SYSTEMS