

**CANNON**  
RADIO CONTROL

2756 N. GREEN VALLEY PKWY STE. 405

HENDERSON, NV. 89014

**SYSTEMS**

TEL NO. (702) 896-7203 FAX NO. (702) 896-7206

**1994**

**CATALOG**

**OF**

**THE WORLD'S  
SMALLEST**



**RADIO CONTROL SYSTEMS**

**TRANSMITTERS, RECEIVERS,**

**SERVOS, BATTERIES,**

**AND ACCESSORIES**

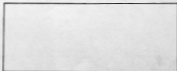
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2756 N. GREEN VALLEY PKWY STE. 405  
HENDERSON, NV 89014

**WORLD'S LEADING MANUFACTURER  
OF  
SUPERLIGHT DIGITAL R/C SYSTEMS**



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## HOW TO ORDER

### CANNON RADIO CONTROL EQUIPMENT

**ORDER DESCRIPTION** Please Specify, as applicable, on all orders Full Description - Model No., Freq.; No. of Channels desired; Tx Type & Stick Mode; Dual Rates; Mixer Type; Special Options; Rx Type Plug Type and Color; Servo Type & Qty; Battery Size and Type (by Part Number); Retail Price and Special Price, if applicable. On other items Full Description, Part No., correct price, etc., Sales Tax & Shipping Costs.

#### PLEASE USE PART NUMBERS TO IDENTIFY EVERY ITEM

**SYSTEM PRICING** R/C Systems, Transmitter and Receiver prices are based on 72 MHz frequencies, 2-Axis Tx sticks, and with types and quantities of Servos listed. Compute variations from regular Systems or File packs as follows:

1. Add \$20.00 to System prices, or \$15.00 to File Packs and separate Tx or Rx for 2T, 2R, 3S, 40, 50, 53 MHz or other frequency band. Add \$17.50 for Single (3-Axis) Transmitter Stick.
2. If equipment ordered varies widely from the standard catalog offering, or if more than one item is deleted from a standard package, total price will be based on accumulated prices of individual items.

**SPECIAL ORDERS** When making a SPECIAL ORDER be very precise as to exact requirements. Verify Special pricing on your order. A 50% NON-REFUNDABLE DEPOSIT is required with SPECIAL ORDERS. Note that all Cannon equipment is built to your specifications.

**WARRANTY AND REPAIR SERVICE** Please note that most all items of equipment listed herein are warranted by Cannon R/C Systems. This includes CANNON equipment sold under the Charlie's Label. Equipment needing warranty service MUST be returned to Cannon R/C Systems. A list of U.S., Canada and Mexico Service Centers is included with every new System, or is available with a SASE envelope. These Service Centers DO NOT handle CANNON Warranties but you may use them for any other repairs if Factory Service is not convenient. Refer to the specific equipment warranty with your purchase.

**SHIPPING AND HANDLING** (Contiguous U.S. Only - Additional Cost for other areas). Radio Control Units - Add following amounts to order: Systems - \$10.95, \*File Packs - \$8.25, Transmitters - \$7.50, Receiver, Servos, or Batteries - \$3.50. Small Items or Parts - \$3.00, Schematics - \$2.50. \*When Tx is sent in for Rx Tuning, use System Cost of \$10.95.

**DEALER ORDERS:** All items from CANNON R/C are priced F.O.B. Henderson, NV. Shipping and handling will be added to all Dealer Net Prices. Shipping and Handling as well as Equipment Costs are subject to change without notice. If charges occur, you will be advised at time of order. Equipment prices are also subject to change if supplier has increased selling price.

**TELEPHONE ORDERS** Will be accepted to expedite scheduling and delivery. However, dated written confirmation of order is required. Otherwise we will accept no responsibility for incorrect or late shipments due to verbal misunderstandings.

**PAYMENT TERMS** Money Order or Cashier's Check with order will expedite shipment. All payments are required in advance. Personal or Business Checks are acceptable; allow three (3) weeks for checks to clear before shipment. Exception: Customers with whom we have had satisfactory prior experience - NO DELAY.

C.O.D. Orders - Accepted only with 20% advance deposit. C.O.D. for extra.

Open Accounts - Orders will be shipped Open Account only to those who have submitted accurate application forms and have been advised of Open Account status.

**SPECIAL ORDERS** - These require a 50% NON-REFUNDABLE ADVANCE DEPOSIT regardless of Open Account or Customer Status. MC or VISA accepted on orders of \$25.00 or more. (Not accepted on Repairs). Personal Check O.K., but may be delayed for clearance. COD's O.K. with 20% Advance Deposit.

**METHOD OF DELIVERY** For R/C Systems, File Packs and R/C Components, shipment is via UPS Ground unless otherwise specified. Sometimes small items may be shipped first class or parcel post instead of UPS. (Extra charge will be made for Parcel Post, Air or UPS Next Day or Second Day Air). Larger or heavier items will be sent UPS Ground.

**ORDER CANCELLATION OR RETURN** Any items returned for exchange or credit will be subject to a 25% restocking charge. Charges are for checking and/or repackaging equipment. Items will not be accepted for return without prior written approval in advance. Letter must contain complete and specific reasons for return request. Customer must pay shipping costs both ways for returned or exchanged items. Special Order items, including Systems and File Packs, will not be accepted for credit or exchange.

**SCHEMATICS** Available for all CANNON RADIO CONTROL Systems ONLY at \$5.50, plus \$2.50 S & H in the USA. Shipping to Canada \$4.00. Shipping to other Countries is \$5.75 plus cost of the Schematics. No COD's. Specify in detail: Equipment Type & Year, exact Model, No. of Channels, Frequency, Tx & Rx types, Servo type, plug type and plug color. Battery type and size, 3 or 4 wires, etc. Internal photos of equipment are helpful in identifying units.

**PRO-FORMA INVOICES** INVOICES THIS MARKED INDICATE THAT ADVANCE PAYMENT FOR MATERIAL IS REQUIRED BEFORE SHIPMENT WILL BE MADE.



MASTER CARD OR VISA ACCEPTED ON ORDERS OF \$25.00 OR MORE. NO COD'S WITHOUT 20% ADVANCE DEPOSIT. CDD FEES ARE EXTRA. REMEMBER THAT SHIPPING COSTS DECREASE AS ADDITIONAL ITEMS ARE PURCHASED. PRICES SHOWN HEREIN EFFECTIVE IMMEDIATELY UPON RECEIPT. PRICES SUBJECT TO CHANGE WITHOUT NOTICE. ADD YOUR LOCAL SALES TAX IN NEVADA.

VISA

# NEW MICRO-ELITE & STAR-LITE R/C SYSTEMS FOR 1994

After months of design effort and exhaustive flight testing, Cannon now offers these two new Narrow-Band R/C Systems. Both feature excellent selectivity to reject undesired interference from other frequencies. Each is designed to operate on the new 20 KHz channel spacing. Both Systems utilize AM (Amplitude-Modulation) modes, not available on FM. Units are not warranted against 2nd or 3rd order FM or Image Frequencies.

## MICRO-ELITE SYSTEMS

The New 1994 NARROW-BAND MICRO-ELITE Units (formerly Super-Micro) are extremely identical to our STANDARD 810 and 910 Series SUPER-MICRO Systems which have proven so successful and outstanding over the years. Always known as the World's Smallest and Lightest R/C Systems, the new 920R5A MICRO-ELITE Receiver holds the distinction of being the only TRULY Sub-Minature NARROW-BAND Equipment currently available.

New Model 910 Transmitter features now include Servo Reversing on all Channels. Light Touch Control Sticks, Servo-End Point Adjustments and, as options, Dual Rate Controls and 2 different Two-Channel Mixers Transmitter, with Gold Sticker, meets all AMA & FCC requirements for today's narrow band operation.

The New Model 920R5A Narrow Band Receiver is identical in size and weight to our SUPER-MICRO offered previously. Now it incorporates a Balanced-Mixer front for added noise rejection, plus new IF filter circuitry to insure optimum selectivity and desired narrow band operation. In addition, the new receiver offers operation up to six channels.

In order to differentiate between the older 810 & new 920R5A Micro & MICRO-ELITE Receivers & Servos, Micro type cable & servo plugs are color-coded. Older units have BLACK Micro plugs. Narrow Band Models have RED plugs. There has been a receiver-servo wiring change in the newer Micro plugs. CE-9 Servos with BLACK Micro Plugs and with RED Micro Plugs are not interchangeable because of plug wiring differences. Servo mechanics and electronics are identical. Plug colors are for identification, be sure and specify when ordering which type is desired. There has been NO WIRING CHANGE in units using Dean's plugs. NOTE: 920R5A MICRO-ELITE Receivers are available on Special Order with BLACK Micro Plugs or DEAN'S for interchangeability with older units. Specify plug type and color.

New receiver battery packs are offered with the 910/920 in three sizes: 50 mah, 110 mah and 270 mah. These come in either square or in-

line packs, selectable for your specific installation. Weights are decreased by use of shrink wrap battery pack covering instead of hard plastic. An added standard feature is an External Charge Receptacle and a Charge Reducer integrated with the ON/OFF switch, providing ease of external charging with virtually no weight increase.

Five Pack weights are shown on page 7. Outline drawings are included on pages 5 & 8.

## STAR-LITE SYSTEMS

This "NEW STAR" is the R/C Sky offers the same Model 910 Transmitter supplied with the new MICRO-ELITE System, and with the same options.

Performance of the STAR-LITE Receiver is comparable with that of the MICRO-ELITE, but is a slightly larger size. Cabbed Dean's plugs are standard with this system, no other types are offered. Seven-channel capability is available in the STAR-LITE Receiver.

A choice of servos enables you to fit this system to ANY size aircraft you wish to fly. CE-9D Micro Servo Sglitters with this 1.0 oz. STAR receiver permit operation in the smallest aircraft, the new CE-15 STAR Servos at only 0.9 ounce provide power and speed for up to 80 powered aircraft.

With the above equipment we offer receiver packs in 50 mah, 110mah, and 270 mah battery sizes. These cover all practical needs for both ELITE and STAR equipment. Battery choice is yours.

The following pages cover detailed specs on everything mentioned above, plus accessories for sale, and items that are still available to interface with older equipment. SHIPPING AND HANDLING COSTS are shown on page 2.

## DETAILED DESCRIPTION OF SYSTEMS

### NEWEST MICRO-ELITE EQUIPMENT WORLD'S SMALLEST R/C SYSTEMS

CANNON presents the 1994 NARROW BAND MICRO-ELITE System, by far the smallest and lightest R/C Systems in production today and the ONLY Micro System with NARROW BAND capability! The photos show that both the RECEIVER and CE-9D SERVOS are considerably smaller than a standard U.S. Commemorative Stamp, emphasizing the importance of SIZE and WEIGHT in aircraft such as those for Electric power and small models.



FIGURE 1. MICRO-ELITE NARROW-BAND R/C SYSTEM

Reduced size and weights of both the MICRO-ELITE Receiver and companion Servos make this system possible. It is light enough for multi-channel CO2 airplanes, indoor aircraft, Schoodyard Scale, small & large electric planes, miniature CG Timers, Rocketry and Free-Flight rotor, yet has servos powerful enough for gliders and aircraft using engines up through 40 cubic inch displacement! To prove this point, a new World Speed Record was set using the standard SUPER-MICRO system in a Quarter-Midget pylon racer. This Record still stands!

Each complete MICRO-ELITE System consists of a Transmitter, Tx Antenna, Frequency Flag, Dual Charger, Discrete Receiver, Rx Nicad Battery of your choice, specified quantity of CE-9D Servos, Servo Mounting Plates and Aileron Tray (4 and 5 CH. only). Equipment is available in 2 thru 5 channels. Any Systems or Five Pack may be converted up to 5 channels at factory for basic difference in system costs, plus \$10.00 for labor. Extra servos must be purchased separately.

Unless customer specifies otherwise, the standard Rx Nicad Pack supplied with 2 or 3 channel units is 110 mah, 270 mah for 4 or 5 channels. Either pack available upon request, or lighter 50 mah pack can be supplied. All batteries available at same price, but specify size and plug when ordering.

### DELUXE MICRO-ELITE SYSTEM PRICES

ITEM	PART NUMBER	PRICE
2 CH., 2 SERVOS	ME920-22A	\$261.95
3 CH., 3 SERVOS	ME920-31A	\$309.95
4 CH., 4 SERVOS	ME920-44A	\$359.95
5 CH., 5 SERVOS	ME920-54A	\$369.95

Prices are based on Standard 72 MHz only. Refer to Available Frequencies page 7. Free Pricing, Shipping Costs and Ordering information on page 2.

System prices are based on a Standard Transmitter (See page 4). For Dual Rate Controls (Aileron & Elevator) add \$20.00 to prices shown above. For A/E Mixer Option add \$39.95, \$10.00 more for A/R Mixer.

PLEASE UNDERSTAND that ALL of our equipment is BUILT TO ORDER, so reasonable time must be allowed for production and shipment. Because of the wide variety and options of units we produce, including Model Types, Frequencies, Number of Channels, Battery Selections, etc. it is impossible for us to stockpile equipment which might meet your desires.

### TRANSMITTER, MODEL 910

This plastic cased transmitter is extremely rugged, made of high-impact ABS plastic with stylized design. Small size and light weight make it very comfortable to handle. In many years of production we have NEVER seen a Tx case which required replacement because of damage.

Case size is 1-11/16 x 4-11/16 x 5-3/8"; total transmitter weight, with antenna, is only 1-1/8 lbs., including 600 mAh 5-Cell nicad batteries. Transmitters are normally supplied in One-Stick (2, 3 CH) or 2-Stick (4, 5 CH) configurations, either Mode 2 (Standard) or Mode 1. A single 3-Axis Stick is available for \$17.50 extra (4 and 5 channel Models only).

Transmitter control sticks are the new Dushan "Soft-Touch" controls, reducing operational effort required by 50%. These are Open Signals designed to give optimum "feel" and best control response.

Incorporating an RF output meter, 600 mAh nicad batteries, a 48" 3-Section collapsible antenna, and other features described herein, this unit becomes an outstanding, yet powerful, small transmitter which is very light, perfectly balanced and preferred by hundreds of R/C owners. A new "Max-Power" RF section provides a nominal RF output JUST below the legal 750 mw maximum on 72 MHz prescribed by the FCC. NO OTHER TRANSMITTER OFFERS HIGHER POWER OUTPUT!



FIGURE 2. MODEL 910 TRANSMITTERS

Basic Standard Transmitter controls are as follows: The 2-channel model employs one 2-axis RH centering control stick for Rudder & Elevator, no LH control.

On 3-channel models a 2-axis RH centering stick controls Rudder & Elevator; a LH proportional lever is available for Motor Control, or other desired proportional function.

Mode 1 control stick arrangements are no longer available on 2 and 3 channel models. Transmitter controls described above are Mode 2. Order a 4-channel or 5-channel transmitter if Mode 1 controls are required.

Four and five channel models utilize two RH sticks for four proportional channels. The fifth channel (not proportional) is switch-controlled to give up-down operation of Landing Gear, Spoilers or another function.

Transmitters on Mode 2 have the RH horizontal centering stick to operate Aileron (or Rudder) and the RH vertical centering stick to control Elevator, whereas the LH stick provides horizontal centering control of Rudder and vertical ratcheted control of MOTOR.

Mode 1 type is similar except ratcheted vertical MOTOR Control is on the RIGHT Stick and centering elevator is on the LEFT Stick.

As an option, a THREE-AXIS Single-Stick Model is available, but only on four and five channel Units. The Three-Axis Stick is on the RH side and has controls for Aileron, Elevator and Rudder (with Control Knob on end of Stick). The fourth channel (MOTOR) has a ratcheted vertical stick, with, on the LH for Motor control. Fifth channel, when included, gives UP-DOWN Switch control (not proportional) for Landing Gear, Spoilers - or other function. Extra cost for the SINGLE STICK (3-AXIS) Model is \$17.50.

Added Standard features on the Model 910 Transmitter include Servo Reversing on all channels and Servo End Point Adjustments which permit the operator to tailor individual servo throws to obtain desired control action. Example: Access to the most needed servo adjustment (Motor Control) is available through an opening in the rear of the transmitter case. A special tool is furnished to make this adjustment. All other channel servo throws may be adjusted in like manner after removal of transmitter back.

Transmitter Charging is thru a diode-protected Charge Jack. Matching plug is on the Cannon Model 12CC-910 Charger. Model 12CC-910 Charger has 1 concave Tx plug & 1 Rx audio Charge plug.

Optional transmitter controls, available at extra cost, include Dual Rate switches for the first two channels, Aileron and Elevator or Rudder and Elevator. Selectable use of these switches gives full or partial travel of either or both of these two related servos. Plus internal to the transmitter permit operator to make Dual Rate adjustments to obtain desired throw.

Another option is a Mixer Circuit, Switch Selectable, for mix of Aileron and Elevator channels in any proportions desired. This circuit offers various control mix ratios with control preference on selected functions. As Aileron & Rudder Mixer, (A/R Mixer), or other combination, is available on Special Orders (\$10.00 more than A/E Mixer).

#### MODEL 910 TRANSMITTER PRICES

910T (2)	2 CH - \$138.50	910T (3)	3 CH - \$159.95
910T (4)	4 CH - \$167.95	910T (5)	5 CH - \$176.95

Add \$17.50 for Single Stick (3 Axis, 4 & 5 CH only).

Prices shown are for Standard 72 MHz frequencies only. Add \$15.00 to Tx cost for other frequency bands. See list of Available Frequencies, page 7.

#### OPTIONAL EXTRAS

DUAL RATE SWITCHES - (Aileron & Elevator)	\$28.00
MIXER CIRCUIT - (2 Types) - Adjustable & Switch Selectable	
Type AE - For Aileron & Elevator -	\$34.95
Type AR - For Aileron & Rudder -	\$48.95

NOTE: On Type AE Mixer, both Dual Rate and Mixer Controls can be used simultaneously on Channels 1 and 2.

### IMPORTANT! FREQUENCY MATCHING

Bandwidth on these new MICRO-ELITE and STAR-LITE Receivers is so narrow that they require PRECISE frequency matching to the operating Transmitter. Although we offer these receivers in Flight Packs, we can not guarantee proper receiver operation with Transmitters other than Cannon units unless your Tx is EXACTLY on frequency. We can determine this if you send your Tx to us when ordering a matching Flight Pack. If your Tx is an frequency, our Flight Pack will be tuned to match at no extra charge. If your Tx is out of tolerance (maximum 500 cycles) from correct frequency, we will recommend that you purchase a CANNON TX to mate with our Rx, or have your Tx put an correct frequency by your Manufacturer, Dealer or Technician before Rx tuning.

If you purchase a Narrow Band Flight Pack without verifying your Tx frequency and properly matching it to our Rx, we accept no responsibility for correct match and trouble-free in-flight operation.

Tuning instructions will be supplied with each new Flight Pack but we offer no guarantee of perfect match if tuning or other adjustments are attempted outside our control.

## MICRO-ELITE RECEIVER, MODEL M920R5A

The new NARROW BAND MICRO-ELITE Receiver Model M920R5A is supplied as standard in 2, 3, 4 or 5 channels. It is capable of 6 channels to use with a 6-CH TX. If channel conversion is desired later, use \$20.00 as modification cost per channel added. RED Micro plugs are standard with this unit, but DEAN's or BLACK Micro plugs can be specified if desired, at no cost difference. No other plugs are available on this Rx.

This Receiver has single-tuned RF, a FET Balanced Mixer, dual AGC, narrow band Crystal Filter and simplified decoder with 6 channel capability. It has a short 24-inch antenna for installation ease in small aircraft. Even so, receiver range is the same as any full size receiver & therefore can be used in any size aircraft, even Quarter Scale, with appropriate servos and battery pack. Selectivity is outstanding!



FIGURE 3. MICRO-ELITE NARROW-BAND RECEIVER

### MICRO-ELITE RECEIVER WEIGHTS & PRICES

ITEM	PART NO.	WEIGHT (MICRO) OUNCES	GRAMS	WEIGHT (DEAN'S) OUNCES	GRAMS	PRICE
2 CH.	M920R512	.57	16.0	.55	15.5	\$87.95
3 CH.	M920R513	.63	17.5	.58	15.9	91.50
4 CH.	M920R514	.64	18.3	.57	16.3	94.95
5 CH.	M920R515	.65	18.6	.58	16.5	98.50
6 CH.	M920R516	.66	18.9	.59	16.7	102.00

Refer to figure 5 for additional data on Dimensions & Weights of MICRO-ELITE Receiver and CE-9D Servo.

Prices are same for the Rx with either Micro or Dean's plugs. Specify type and color desired when ordering. **IMPORTANT: Specify if to be used with ACE/DEAN'S equipment.**

### CONNECTOR TYPES



FIGURE 4. CONNECTOR IDENTIFICATION

A new Cannon Micro plug is standard with 2 thru 6 channel System or Filter Packs using the ELITE Rx. Plugs are ultra small (size of 3-pin Dean's size and weight), have gold-plated contacts and are keyed to prevent incorrect plug-in. On ELITE Rx, if specified, Dean's plugs can be supplied instead at no extra cost. All channel units come with plug you specify. When ordering plugs separately, specify type needed: use letter designation to identify correct style when purchased separately and color (RED or BLACK) MICRO plug. Dean's plugs are \$1.25 each; Micro plugs are \$1.50 each. No extra cost for either Dean's or Micro plugs in Filter Packs or Systems.

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

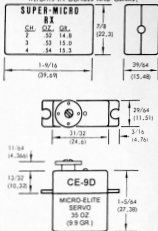


FIGURE 5. MICRO-ELITE RECEIVER AND SERVO DIMENSIONS (SHOWN ACTUAL SIZE)

## MICRO-ELITE SERVO, MODEL CE-9D



FIGURE 6. MICRO-ELITE SERVO, MODEL CE-9D

This improved version of the Cannon MICRO-ELITE Servo still smaller and lighter in the World, uses an isolating repair capacitor, tiny but very efficient high speed condenser motor, and a New surface mount NE542D IC by Signetics for signal speed and power. Servo is compatible with standard pulse-pulse receiver-decoders. Price includes choice of DEAN's or Micro plug. When ordering, BE SURE to specify plug type, ESPECIALLY whether Micro plug color should be BLACK or RED. See descriptive plug data on page 3. Proper Micro plug color should be ordered to match other older Systems (Black) or newer Narrow Band Models (RED). For Funco plugs, add \$4.00 per Servo. (Specify type, Special Order). Also, advise Tx and Rx types that servo will be used with (Other plugs are available on ELITE Rx).

CE-9 and CE-9D Servos (BLACK plug) are available in Standard rotation (unmarked) or reverse rotation (marked "R"). Specify desired type when ordering. New Model CE-9D Servos (RED plug) are available only in Standard rotation. Reversing switch can select rotation desired.

For those who need a light weight retract servo, we offer a 150 degree version designated CE-9D(RT). Specify plug TYPE & color (RED or BLACK). Price is \$88.95 with Standard Micro or Dean's plugs, \$4.00 more for other types.

## MICRO-ELITE SERVO SPECIFICATIONS

### MICRO-ELITE SERVO, MODEL CE-60 World's Smallest

Size	2964 x 31/32 x 1-3/32 inches
Weight (Micro Plug)	35 ounce
Torque (Nominal)	28 oz in
Tranion Time (100 degree)	0.4 Sec
Centering Method	External
Static Drain	6 ma
Servo Price (CE-60)	\$52.95
Servo Price (CE-60 KT) 150 degree	\$55.95

NOTE: Servo usage is independent of equipment operating frequency or type of system transmission (AM or FM)

### MICRO-ELITE SERVO ACCESSORIES



FIGURE 7. SUPER-MICRO R-3 MULTIPLE TRAY

R-3 SYSTEM TRAY (Figure 7) This adaptable tray accommodates any MICRO or ELITE Servo in a single shock-mounted unit. In addition, tray is marked so that it may be cut apart to make a number of vertical tray configurations (Figure 8). Not supplied with System or Five Pack. R-3 tray available separately - \$3.25



FIGURE 8. SERVO TRAY CONFIGURATIONS



FIGURE 9  
MICRO-ELITE  
SERVO  
AILERON TRAY

AILERON TRAY (Figure 9). This servo mount (for Micro Servos only) can be used for either horizontal or vertical mounting. One is supplied with each System, but not with Five Packs. Available separately, P/N AT-100 - \$2.15

SERVO MOUNTING PLATES. Figure 10 shows Servo Plate usage with all CE-5 Series Model Servos. Designed as light-weight mounts, these plates can be attached to wood rails in the aircraft, allowing servos to be mounted as in a standard single tray. Two are included with each servo. Priced separately, P/N SMP-100 (per pair) - \$75

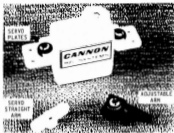


FIGURE 10. SERVO MOUNTING PLATES AND OUTPUT ARMS

SERVO OUTPUT ARMS (Figure 10) One round and one straight arm come with each servo. Extra - \$ 75 each (Specify type req'd) The adjustable arm shown provides somewhat greater throw. Not supplied. Available separately \$1.25. 50% longer straight arm is available - \$1.00

### RECEIVER NICAD BATTERIES

Small sizes offered are 50, 110 and 270 mah, all in either square or inline packages. These are illustrated in figures 11 and 12. All batteries are 4.8V and include a subminiature switch in the battery cable. A subminiature charge jack is mounted in the battery switch plate, as is a charge reducer resistor (or diode) as needed. This jack permits external charging of battery and requires need for a separate Charge Reducer or Adapter on Receiver batteries. Small Rx Battery Specs are listed below. \$27.95 any size.



FIGURE 11. NICAD RECEIVER PACKS (INLINE)

### RECEIVER BATTERY SPECIFICATIONS

NICAD INLINE RX PACKS (Figure 11) (\$27.95 each)

BATTERY	MICRO	PART NO. (PLUG TYPE)	DEAN'S SIZE	WEIGHT
50 mah	IB-50M	IB-50D	13/32 x 19/32 x 1-5/8"	.61 oz. (17.3 gr.)
110 mah	IB-110M	IB-110D	9/16 x 3/4 x 2.25"	1.24 oz. (35.4 gr.)
270 mah	IB-270M	IB-270D	9/16 x 1-3/16 x 2.25"	2.1 oz. (59.9 gr.)



FIGURE 12. NICAD RECEIVER PACKS (SQUARE)

NICAD SQUARE RX PACKS (Figure 12) (\$27.95 each)

BATTERY	MICRO	PART NO. (PLUG TYPE)	DEAN'S SIZE	WEIGHT
50 mah	SB-50M	SB-50D	19/32 HI X 13/16" SQ.	.61 oz. (17.3 gr.)
110 mah	SB-110M	SB-110D	5/8 HI X 1-1/8" SQ.	1.24 oz. (35.4 gr.)
270 mah	SB-270M	SB-270D	1-1/4 HI x 1-1/8" SQ.	2.1 oz. (59.9 gr.)

## BATTERY FLIGHT LIFE

Everyone wonders how long small battery packs will last with Cannon Micro Systems. Expected Flight Life for various battery sizes and operating channels is charted below. These figures are based on fully charged batteries in A-I condition, line life derived from field experience.

BATTERY	EXPECTED FLIGHT LIFE (MINUTES)			
	2 CH	3 CH	4 CH	5 CH
50 mah	24	18	15	12
110 mah	50	40	30	20
270 mah	150	120	90	60

## SYSTEM CHARGERS

**DUAL AC CHARGERS** (Figure 13) Charger, with two charge indicator lamps, is supplied with Systems to charge Tx and Rx nicad batteries simultaneously or separately. Nominal charge rate is 40-50 mah except for 50 and 100 mah cells whose charge rates are restricted by built-in charge limiters to prevent overcharge and cell damage. Charger incorporates two phone plugs. Measure size for Tx, Sub-miniature size for Rx. Charger 32CC-910 has 1.5 concentric Tx plug and Submin Rx phone plug.

Dual Charger, P/N 12CC-910 (120V) \$17.95  
 Dual Charger, P/N 22CC-910 (220V) \$19.95  
 Dual Charger, P/N 32CC-910 (120V) \$17.95



P/N 32CC-910 (120V)  
NOT SHOWN

FIGURE 13. SYSTEM DUAL CHARGER AND FLITE PACK CHARGER

**FLITE PACK CHARGER** (Figure 13) P/N 4CA-910 (120V only) is available separately, if needed. Equipped with one miniature phone plug, unit charges 4-cell Rx nicad pack at 40-45 ma. Price \$11.95



FIGURE 14. MODEL AC-910 AUTO-CHARGER

**AUTO CHARGER** (Figure 14) P/N AC-910, equipped with one Sub-mini. phone plug, works from automatic cigarette lighter socket and permits charging of 50, 110 and 270 mah Rx battery packs at field in 15 minutes max. Price \$15.95

## CHARGE PLUGS

Miniature size plug (and socket) are used for Transmitter charging. The Subminiature size is used for Receiver charging. Either Plug OR Socket are priced at \$1.25 each. Please specify size and type desired when ordering, and add \$1.50 for shipping and handling.



FIG. 15 CHARGE PLUGS, SOCKETS

## MICRO-ELITE FLITE PACKS

New NARROW BAND MICRO-ELITE Flite Packs, available separately, are compatible with practically all standard AM R/C transmitters on the Market today, PROVIDING the Tx is ON FREQUENCY! See note, page 4, regarding Frequency Matching.

Flite Packs include all components which are to be installed in the aircraft, glider or other vehicle, namely, Receiver, Servos and Nicad Rx Battery of your choice (please specify). Transmitter, Tx Antenna, Frequency Flag and Charger are not included. However, a Flite Pack Charger is available separately, if needed. (See page 7).

## NARROW BAND MICRO-ELITE FLITE PACK PRICES

ITEM	PART NUMBER	PRICE
3 CH, 2 SERVOs	MSM920FP-32A	\$192.95
3 CH, 3 SERVOs	MSM920FP-33A	\$229.95
4 CH, 4 SERVOs	MSM920FP-44A	\$271.95
5 CH, 4 SERVOs	MSM920FP-54A	\$276.95
6 CH, 4 SERVOs	MSM920FP-64A	\$281.95

Deduct \$15.00 for omission of one CE/HD Servo from Flite Pack. If a second set is omitted from Flite Pack, calculate total cost on individual unit prices, not Flite Pack prices. Pricing, Page 2. Extra Std Servo = \$52.95.

## MICRO-ELITE FLITE PACK WEIGHTS

Weights listed below include new Narrow Band MICRO-ELITE Rx, 50 mah Rx nicad, Micro plugs and one CE/HD Servo per Channel.

2 CH - 1.83 OZ. (51.9 GR.)	3 CH - 2.19 OZ. (62.1 GR.)	4 CH - 2.55 OZ. (72.3 GR.)
5 CH - 2.56 OZ. (72.6 GR.)	6 CH - 3.57 OZ. (101.2 GR.)	

Add 65 oz (18 gr) to above Flite Pack Weights for 110 mah pack, 1.49 oz (42.5 gr) for 270 mah pack. Add 60 oz (85 gr) to above Weights for each DEAN'S plug.

## FREQUENCIES AVAILABLE

All R/C Systems, Flite Packs, Transmitters and Receivers are available on the 72 MHz frequencies listed below at prices quoted herein. If equipment is desired on any other frequency band, add \$20.00 to these prices for complete Systems, \$15.00 for Flite Packs or individual Tx or Rx. ODD-NUMBERED CHANNELS NOW AVAILABLE ON BOTH BANDS.

## BAND SPECIFIC FREQUENCIES

A-27 MHz:	26,995, 27,045, 27,095, 27,145, 27,195
B-29 MHz:	29,745, 29,795, 29,845, 29,895, 29,945, 29,995
C-35 MHz:	35,010, 35,060, 35,110, 35,160, 35,210, 35,260
D-40 MHz:	40,665, 40,675, 40,685
E-50 MHz:	(00)50,800,(01)800,(04)800,(06)800,(08)800,(10)800,(12)800,(14)800,(16)800,(18)800,(20)800,(22)800,(24)800,(26)800,(28)800,(30)800,(32)800,(34)800,(36)800,(38)800,(40)800,(42)800,(44)800,(46)800,(48)800,(50)800
F-53 MHz:	53.1, 53.2, 53.3, 53.4, 53.5, 53.6, 53.7, 53.8
G-72 MHz:	(22)72,830,(14)72,870,(16)72,910,(18)72,950,(20)72,990,(22)72,130,(24)72,170,(26)72,210,(28)72,250,(30)72,290,(32)72,330,(34)72,370
H-72 MHz:	72,720, 72,760, 72,800, 72,840 (Canada only)
J-72 MHz:	(38)72,550,(40)72,590,(42)72,630,(44)72,670,(46)72,710,(48)72,750,(50)72,790,(52)72,830,(54)72,870,(56)72,910
K-75 MHz:	(62)75,430,(64)75,470,(66)75,510,(68)75,550,(70)75,590,(72)75,630,(74)75,670,(76)75,710,(78)75,750,(80)75,790,(82)75,830,(84)75,870

Parenthesis denotes Channel No. for frequencies. Bands A, E, F, G, J & K legal in U.S.A. Bands B, C, D for certain foreign countries. Bands G & H legal in Canada. Frequencies 72,060, 72,160, 72,260, 72,320, 72,400, 72,900, & 75,400 not legal in U.S.A., but possibly may be used in Canada.

No operator's license required for bands A, E, J & K. Bands E & F require FCC Amateur License. Bands G & J are for Aircraft & Glider use Only, Band K for surface use.

NOTE: Low Band Channels 17 thru 34 are assigned to HARRISON BAND Equipment ONLY. Hi Band Channels 38 thru 56 may be either WIDE or NARROW BAND Equipment. NARROW BAND TRANSMITTERS ARE NOW MANDATORY ON BOTH LO & HI BANDS!

## ADDING CHANNELS (All Models)

Factory cost of adding channels is based on retail price DIFFERENCE between System channel counts BEFORE and AFTER conversion, plus \$25.00 for labor. If additional servos are desired they may be purchased separately. Conversion costs of Transmitter or Receiver are based on current hourly repair charges, plus parts. Add to this shipping, handling and any repair costs needed.



FIGURE 16. STAR-LITE NARROW BAND R/C SYSTEM  
NEW STAR-LITE EQUIPMENT  
WORLD'S MOST VERSATILE R/C SYSTEM

CANNON now offers a new R/C System, the STAR-LITE, which could become a Universal Standard because of its application to ANY SIZE AIRCRAFT. The Receiver offers Small Size, Light Weight, Long Range, outstanding Selectivity and Narrow Band capability. Standard DEAN'S plugs on the Receiver permit use of a wide range of servos. No other plugs offered.

With MICRO-ELITE Servos and small Rx batteries, total weight is so low that the MICRO-ELITE can be adapted to very small aircraft and gliders. The new size servo, (ICE-15A STAR), still light weight, has sufficient speed and power to control large gliders and aircraft through 80 size. Because of high speed, high torque, and strong gearing the STAR Servo is particularly adaptable to Cars and Car Racing. And with HIGHER POWER Servos, the sky is the limit as far as vehicle size and application are concerned!

Components of the STAR-LITE System include a Transmitter, Antenna, Frequency Flag, Receiver, appropriate number and type of Servos selected, and Rx Battery Pack of your choice. System is available in 2 through 5 channels, but the STAR Receiver offers up to 6 channels if ordered. The STAR System offers several Rx box sizes. All items are described below.

### TRANSMITTER, MODEL 910

This unit is exactly the same as described previously under the MICRO-ELITE section of this Brochure (Page 4). The Transmitter & other STAR-LITE units are shown in Figure 16.

### DELUXE STAR-LITE SYSTEM PRICES WITH STAR SERVOS

ITEM	PART NUMBER	PRICE
2 CH., 2 SERVOS	SL920-22B	\$219.95
3 CH., 3 SERVOS	SL920-31B	\$264.95
4 CH., 4 SERVOS	SL920-41B	\$309.95
5 CH., 5 SERVOS	SL920-54B	\$314.95

Prices based on Standard 72 MHz Frequencies. See Frequency Availability & Pricing on page 7. Shipping costs on page 2. System prices include Standard 910 Transmitter as described on page 4.

## SCHEMATICS

Schematics for Cannon's older R/C Systems, as well as the new Narrow Band Systems are available for \$5.50 each set plus \$2.50 (in U.S.) shipping and handling. When ordering be sure and identify both Transmitter and Receiver by part number so correct schematics will be sent. If Part Numbers are questionable please send internal & external photos of equipment for identification. NO C.O.D. ORDERS ARE ACCEPTED.

## STAR-LITE NARROW BAND R/C SYSTEMS

### A NEW BLOCK SYSTEM IS ON THE WAY!

Very soon CANNON will make available a new "SPORT BLOCK" System which houses the STAR-LITE NARROW-BAND Receiver and two STAR Servos in a single case for easy aircraft installation. Provision is made to operate up to three external STAR Servos from the same block, making possible up to five channels of control. DEAN'S plugs will standardize the Block with our new STAR-LITE equipment.

Spins and photos will be included in upcoming brochure and flyers. The Two-channel Block weight will be approx. 2.7 ounces, plus external battery of your choice and additional 9 or 12v. 1/2 power servos as needed. Prices to be very close to those of the STAR-LITE R/C Systems. Block will also be available separately. Price to be announced later.

### STAR-LITE RECEIVER

Although similar in quantity and Narrow Band performance to the MICRO-ELITE Receiver, this Model SL920RB STAR-LITE Receiver utilizes discrete standard size components, together with a subminiature decoder I.C. This configuration makes the receiver slightly larger and heavier than the micro unit but less expensive. Also, it is easier to work on should this ever become necessary.

DEAN'S 3-pin plugs, on cables, are standard with this Receiver, all Servos and Rx Batteries. No other plugs are offered. A technical description of the Rx circuit is the same as for the MICRO-ELITE Rx on page 5. The STAR-LITE Receiver measures 1 1/16" thick x 1-13/32" wide x 1-9/16" long. Weights are shown on Receiver price schedule below.

ITEM	PART NO.	WEIGHT (DEAN'S PLUGS ONLY)		PRICE
		OUNCES	GRAMS	
2 CH.	SL920R(5)2	.99	28.0	\$69.95
3 CH.	SL920R(5)3	1.00	28.3	\$72.95
4 CH.	SL920R(5)4	1.01	28.6	\$75.95
5 CH.	SL920R(5)5	1.02	28.9	\$78.95
6 CH.	SL920R(5)6	1.03	29.2	\$81.95

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

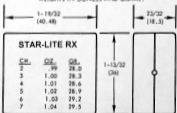


FIGURE 17. STAR-LITE RECEIVER DIMENSIONS & WEIGHTS





FIGURE 18 STAR-LITE RECEIVER, EXTERNAL VIEW

### STAR-LITE SERVO, MODEL CE-15A

Small, but light weight, fast and powerful, the STAR Servo completely fills the needs of the average R/C flyer. It is small and light enough to fit in small aircraft, yet fast & powerful with enough "resilience" to control large models. Dimensions & Data are listed below.

The STAR Servo uses a high speed motor, optimum gear reduction, and high strength gear material to provide a tough, outstanding and powerful mechanism.



FIGURE 19 STAR SERVO, MODEL CE-15A

#### CE 15A STAR SERVO SPECIFICATIONS

Size	3/4 x 1-5/32 x 1-1/2 inches
Weight	0.9 oz. (25.5 grams)
Torque (Nominal)	24 oz. in.
Travel Time (100 degrees)	0.3 Sec.
Centering Method	External, Screwdriver
Static Drain	6 ma
Servo Price (CE-15)	\$39.95
Retract Servo CE-15 (RT) 170 degrees	\$42.95

#### STAR SERVO ACCESSORIES

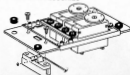


FIGURE 20  
UNIVERSAL  
SERVO TRAY

**UNIVERSAL SERVO TRAY** This Servo Tray accepts two CE-15A Servos side-by-side and one across. Double-sided design also accepts other servos such as D&R and ACE Bassam Midger, Kraft KPS-12, CANNON CE-3, CE-4, CE-5, standard size Durstern servos & Charley's Servos, plus ON-OFF Switch. Mfg. hardware included-P/N UST-1 \$3.50

#### CE-15 TRAYS

CE-15H	Single Horizontal (Aileron) Mount	\$ .75
CE-15V	Single Vertical Mount	\$ .75
CE-15M2	Dual Vertical, Mount, side-by-side	\$ .75
CE-15M1	Triple Vertical Mount, side-by-side	\$ .85

#### CE-15 SERVO ARMS

CE-15T	Triangular Arm	\$1.00
CE-15S	Long Straight Arm	\$1.00

If you order trays or servo arms separately, add sales tax, if applicable, plus \$2.50 Shipping & Handling.

#### STAR-LITE RECEIVER NICAD BATTERIES

Batteries supplied with STAR-LITE Systems and Flite Packs are the same 50, 110 and 270 mah packs used on the MICRO-ELITE System, but come only with DEAN's plugs (Figs 11 & 12) on page 6. Any size \$37.95

#### SYSTEM CHARGERS

System Chargers for the STAR-LITE equipment are exactly the same as that used on the MICRO-ELITE System. Chargers 12CC-910 and 32CC-910 are \$17.95, CA-910 \$11.95, and Auto Charger AC-910 \$15.95

#### STAR-LITE FLITE PACKS

STAR-LITE Narrow Band Flite Packs are also available for use with other make transmitters, subject to Frequency Matching qualifications outlined on page 4 for MICRO-ELITE Systems.

Flite Packs include all components which are to be installed in the aircraft, glider or other vehicle: namely, Receiver, Servo and Nicad Rx Battery of your choice (please specify). Transmitter, Tx Antenna, Frequency Plug and Charger are not included. However, a Flite Pack Charger is available separately, if needed. (See page 7)

#### STAR-LITE FLITE PACK PRICES

ITEM	PART NUMBER	PRICE
2 CH - 2 SERVOS	SL920FP-225	\$160.95
3 CH - 3 SERVOS	SL920FP-335	\$188.45
4 CH - 4 SERVOS	SL920FP-445	\$212.50
5 CH - 4 SERVOS	SL920FP-545	\$215.95
6 CH - 4 SERVOS	SL920FP-645	\$219.95
7 CH - 4 SERVOS	SL920FP-745	\$223.95

Additional CE-15A STAR Servos - \$39.95 Each

Deduct \$12.00 for omission of any one STAR servo from Flite Pack. If a second servo is omitted from Flite Pack, calculate your total cost on individual unit prices, not Flite Pack prices.

#### STAR-LITE FLITE PACK WEIGHTS

Weights listed below include a new Narrow Band STAR-LITE Receiver, 110 mah Rx Nicads and ONE CE-9D MICRO-ELITE SERVO (w/ink DEAN's) per channel.

2 CH - 4.03 oz. (114.3 gr.)	3 CH - 4.94 oz. (140.1 gr.)	4 CH - 5.85 oz. (165.9 gr.)
5 CH - 5.86 oz. (166.1 gr.)	6 CH - 5.87 oz. (166.4 gr.)	7 CH - 5.88 oz. (166.7 gr.)

Add .86 oz. (24.5 gr.) to above Flite Pack Weights for 270 mah pack.

## MICRO-ELITE AND ULTRA-MICRO COMPARISONS AND APPLICATIONS

To select the best System for your needs, SUPER-MICRO (ELITE) units, somewhat heavier but with more powerful servos than the ULTRA-MICRO, are suitable for the following uses:

- 38" to 60" Airframes and engines usable from #40001 to 48 power.
- Gliners to 100 inch Span.
- Pylon Racers

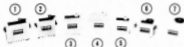
ULTRA-MICRO Units, being lighter weight with lower power servos, best adapt to:

- Airframes 12" to 48", engines from CO2 and small Electric to 810, 820 & 949 2-cycle engines.
- Gliners to 48 inch Span.
- All indoor R/C Models, CO2, Rubber or Electric.
- Free-flight returns, SAM and smaller airframes.

All components of MICRO-ELITE, SUPER-MICRO & ULTRA-MICRO Systems are compatible and interchangeable within power application limitations: TX, RX, Servos, Bats, etc.

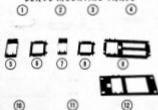
### ACCESSORIES FOR OLDER CANNON EQUIPMENT

#### SERVOS



NO.	MODEL	TYPE	WEIGHT OZ.	THRUST (OZ. IN.)	PRICE
1	CE-28	Rotary	1.4	NOT AVAILABLE	
2	CE-28	Mini-Rotary	1.25	NOT AVAILABLE	
3	CE-48	Mini-Rotary	1.25	20	36.00
4	CE-58	Rotary Linear	1.25	18	36.00
5	CE-88	Super-Mini	.75	NOT AVAILABLE	
6	CE-108	Midsize-Rotary	.88	NOT AVAILABLE	
7	CE-111	H1-Four Rotary	1.82	40	36.95

#### SERVO MOUNTING TRAYS



ITEM	DESCRIPTION	PART NO.	PRICE
1	Vert. mount for 1 CE-4	CE-81	\$ 1.49
2	Vert. mount for 1 CE-4	CE-81	1.49
3	2 CE-4, 5 by 5	SMH-2	2.50
4	2 CE-4, 5 by 5	SMH-2	2.50
5	Vert. mount for 1 CE-2	CE-2H	1.59
6	Horiz. mount for 1 CE-2	CE-2H	1.59
7	Vert. mount for 1 CE-3	CE-3H	1.59
8	Horiz. mount for 1 CE-3	CE-3H	1.59
9	2 CE-2, 5 by 5, 1 across	CE-2H	2.95
10	Mini-lets plus 1 CE-4	TT-3	3.00
11	Vert. mount for 1 CE-8	CE-8V	1.49
12	2 CE-4, 5 by 5, 1 across	SI2H-2	2.95
N/S	Set of CE-4 trays (5 pieces)	CE-4T	2.95

CE-3, CE-4, CE-5 and NPS-12 Servos fit all CE-4 trays.

#### PLUGS & CABLES

ITEM	DESCRIPTION	PART NO.	PRICE
1	Ext. choc. recept., plug	ECR	\$ 3.25
2	Same, wires	ECR-W	4.75
3	Batt. cable, snel sw.	BC-S5	4.75
N/S	Batt. cable, no sw.	BC-S5	3.50
4	Batt. cable, noble sw.	BC-N5	5.50
5	Sw. harness, w. recept.	CE-SWCR	8.00



N/S	Sw. harness, w/o recept.	CE-SW	\$ 8.50
4	Dean's all. ext. cable	D-ACC	6.50
N/S	Dean's 3-pin male	D3M	1.25
N/S	or female plug	D3F	1.25
N/S	Buddy Box Cable, Assembled	BBC-A	10.00
N/S	Servo cable, male Dean's plug	SC28-M	3.00
N/S	Rx cable, female Dean's plug	RC28-F	3.00
N/S	Multicon servo cable	MCS-4	3.75
N/S	Female Rx cable	MCF-4	3.75
N/S	Multicon batt. cable	MCS-3	3.75
N/S	Multicon all. ext. cable	M-ACC	6.50

#### MISCELLANEOUS FITTINGS



ITEM	DESCRIPTION	PART NO.	PRICE
1	Tx Switch, DPDT	T-SPDT	\$ 2.50
2	Sw. guard for (1)	SG-SPDT	1.25
3	Wable switch, 4PDT	NS-4PDT	3.25
4	Sw. cover for (1)	SC-4PDT	1.00
5	Sw. guard for (1)	SG-4PDT	1.00
6	Sw. protector for (3)	SP-4PDT	1.25
7	Submin. sw., DPDT	SS-4PDT	2.50
8	Switch lock	MS-SL	N/A
9	Buddy Box P.B. sw.	BB-SPDT	4.50
10	1.0. sw., SPDT	LS-SPDT	4.50
11	Male plug, 6 pin	TTR-6	4.50
12	Matching receptacle	MR-6	3.25

## NEW 1994 CANNON ULTRA-MICRO R/C SYSTEMS

This long-rumored Super-Small, Lite-Weight ULTRA-MICRO System is NOW in Production and being delivered! **JUST SEE ONE AND BE AMAZED.** These are truly the very smallest, lightest R/C Systems in the WORLD, and NARROW BAND too!

Units are designed for indoor flying of Electric Rubber and CO<sub>2</sub> Models as well as outdoor usage of small powered aircraft 16" and below, for gliders up to 48" span, Rocket Assist Gliders, F-F Return, and SAM coasters.

Fully proportional units utilize the NEW Super-Small AM ULTRA-MICRO Discrete Receiver, a new ULTRA-MICRO Servo and a 50 mah rigid rechargeable battery. Equipment also offered as a BLOCK containing two Servos and Receiver. Either style to 5 channels.

CANNON ULTRA-MICRO Units are available as a complete System with Transmitter, Tx Antenna, AM Discorn Rx (or BLOCK), Servos, Rx Battery Pack, Charger and Accessories. Separately available Flight Pack includes Receiver (or Block), Servos and Rx Battery Pack (no Charger). All units are compatible with existing CANNON equipment, as well as AM Transmitters of other manufacturers which are within frequency tolerance.

### ULTRA-MICRO & UNIT SIZES AND WEIGHTS

DISCRETE RECEIVER - 9/16" hi x 1-1/32" wide x 1-3/16" long

2 CH - 40 OZ. (11.7 GR.)	4 CH - 44 OZ. (12.7 GR.)
3 CH - 42 OZ. (12.1 GR.)	5 CH - 47 OZ. (13.4 GR.)

Sizes and weights include plastic Rx case, all wires, plugs and cables. Deduct .12 oz. (3.5 gr.) if Receiver case is removed.

ULTRA-MICRO BLOCK - 1" x 1-3/16" x 1-1/2"

2 CH Block includes 2 Servos and 1 ULTRA-MICRO RX  
 2" Long (24" Servo) and Battery cable. Up to  
 7 more ULTRA-MICRO Servos may be added to Block -  
 extra Servos each weigh .02 oz.

ULTRA-MICRO SERVO - 7/16" x 1-5/32" x 27/32" - Weight 3 oz. (8.5 gr.) including amplifier, plug, cable and switch.

NICAD RECEIVER BATTERIES - 4.8V, 4 cells, 50 mah size standard with ULTRA-MICRO. Any other Batt available same price, your choice.

+50 mah - Square, P/N SB-50M - 5/8 x 27/32" sq. - .6 oz. (17.36 gr.)  
 In-line, P/N IB-50M - 5/8 x 13/32 x 1-5/8" - .6 oz. (17.36 gr.)

\*110 mah - Square, P/N SB-110M - 5/8 x 1-1/8" sq. - 1.24 oz. (35.4 gr.)  
 In-line, P/N IB-110M - 5/8 x 3/4 x 2-1/4" - 1.24 oz. (35.4 gr.)

\*270 mah - Square, P/N SB-270M - 1-1/4 x 1-1/8" sq. 2.1 oz. (59.0 gr.)  
 In-line, P/N IB-270M - 9/16 x 1-3/16 x 2-1/4" - 2.1 oz. (59.0 gr.)

\* includes cable, switch, plug and built-in charge receptacle.  
 - includes cable, switch, plug and external charge adapter.

See Chart on page 7 for Expected Battery Life.

RX BATTERIES - 50, 100 AND 270 MAH - \$27.95 EACH

### TO RESERVE YOUR ULTRA-MICRO SYSTEM

This NEW CANNON ULTRA-MICRO System has turned out to be a "Dream Come True" for hundreds of Modelers who would love to fly very small R/C Models, indoors as well as Outdoors. Just by rumor and word of mouth we have amassed literally hundreds of orders for this ULTRA-MICRO Equipment, sight unseen.

### EQUIPMENT FEATURES

- World's Smallest and Lightest Fully Proportional NARROW BAND Equipment
- Total weight of 2-Channel Block, plus 50 mah rechargeable battery - 1.6 ounces! For 4-Channels add two .3 ounce Servos
- Hi-Power Transmitter Narrow-Banded and Gold Stickered to AMA Standards
- Narrow Band Receiver with Double-Balanced Mixer input
- Receiver Voltage Requirements - 4.8 to 6V (Voltage Regulated)
- Smallest, Lightest Proportional Servo - .3 oz. complete. Powerful for their size
- Surface Mount Technology used in Servo Amplifier
- Complete Systems, or Flite Packs, Discrete or Block Receivers
- Fly indoors - virtually no application limit - Rubber, CO<sub>2</sub>, Electric and Glow Engines (Outdoors)
- Low Drain Circuitry for long flight life
- Optional Electronic Mixer
- Full Nicad, Tx & Rx, with Dual Charger
- Servo Reversing Standard
- Dual Rates Available

### PRICES FOR ULTRA-MICRO SYSTEMS, FLITE PACKS AND UNITS

TRANSMITTER, MODEL 910T (A-M) - This nicad Transmitter, included in all System orders, is fully described and control options are listed in our 1994 catalog. See descriptive data on page 4. Separately priced as follows:

2 CH - \$138.00 3 CH - \$159.75 4 CH - \$169.75 5 CH - \$176.25

### ULTRA-MICRO COMPLETE SYSTEMS

W/DISCRETE RX

UM920-22C \$281.95	2 CH., 2 SERVOS	UMB920-22B \$291.95
UM920-33C \$325.95	3 CH., 3 SERVOS	UMB920-33B \$335.95
UM920-44C \$388.95	4 CH., 4 SERVOS	UMB920-44B \$398.95
UM920-54C \$396.50	5 CH., 4 SERVOS	UMB920-54B \$396.50

W/BLOCK RX

### ULTRA-MICRO FLITE PACKS

W/DISCRETE RX

UM920FP-22C \$289.95	2 CH., 2 SERVOS	UMB920FP-22B \$299.95
UM920FP-33C \$321.95	3 CH., 3 SERVOS	UMB920FP-33B \$369.95
UM920FP-44C \$298.95	4 CH., 4 SERVOS	UMB920FP-44B \$309.95
UM920FP-54C \$301.95	5 CH., 5 SERVOS	UMB920FP-54B \$319.95

W/BLOCK RX

DISCRETE RX

UM920R(5)2 \$ 93.95	2 CH.	UMB920R(5)2 \$213.95
UM920R(5)3 \$ 97.50	3 CH.	UMB920R(5)3 \$218.95
UM920R(5)4 \$166.95	4 CH.	UMB920R(5)4 \$223.95
UM920R(5)5 \$184.95	5 CH.	UMB920R(5)5 \$228.95

BLOCK (Rx, 2 SERVOS)

### 1994 ULTRA-MICRO SERVO

FASTER UM-1 SERVO - \$59.95 3 OZ., NEW MECHANICS, SURFACE MOUNT (SMT) AMPLIFIER, SMALLER CORELESS MOTOR, TRANSIT (4 SEC) TORQUE (12 OZ. IN.) STATIC DRAIN (6MA)

## LIMITED WARRANTY

FACTORY-BUILT CANNON SYSTEMS AND FLITE PACKS, SERIAL NUMBER 1400 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 WHETHER IN USE OR NOT.

Warranty is not applicable 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, pilot error, radio interference, 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 originally sold.

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

## REPAIR SERVICE

### 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 wherever possible. Both Factory and Service Centers have experience, 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 and CHARLIE'S Equipment are performed at the Factory in Henderson, Nevada to provide full control over product quality which could result in product improvement.



2756 N. GREEN VALLEY PKWY STE. 405 HENDERSON, NV 89014

TEL. NO: (702) 896-7203

## ORDER BLANK

ORDERED BY \_\_\_\_\_ ADDRESS \_\_\_\_\_ DATE \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_ TELEPHONE (\_\_\_\_) \_\_\_\_\_  
3 DIGITS - 4 DIGITS

QTY	DESCRIPTION	PART/MODEL NO.	FREQ.	RETAIL PRICE	CASH PRICE

MC OR VISA NUMBER \_\_\_\_\_

EXPIRATION DATE \_\_\_\_\_

EQUIPMENT COST \_\_\_\_\_

SALES TAX \_\_\_\_\_

SHIP BY: PARCEL POST  AIR P.P.  UPS GND

SHIPPING & HANDLING \_\_\_\_\_

UPS 2ND DAY AIR  OTHER \_\_\_\_\_

TOTAL \_\_\_\_\_

PAYMENT ENCLOSED  DEALER OPEN ACCT  (IF APPROVED)

RETAIL ORDERS  
 ADD SALES TAX,  
 C. O. D. ONLY WITH  
 20% ADVANCE DEPOSIT

SEND PRO-FORMA INVOICE  20% DEPOSIT, BALANCE C. O. D.

IN CASE YOU MIGHT WISH TO ORDER OTHER ITEMS LATER FROM THIS BROCHURE, WE SUGGEST THAT IT WOULD BE HELPFUL TO COPY THIS ORDER BLANK SO YOU MAY RETAIN THE ORIGINAL FOR FUTURE ORDERS.