

# Futaba®

RADIO CONTROL SYSTEMS, SERVOS AND ACCESSORIES



INNOVATIONS IN TECHNOLOGY FOR SUPERIOR CONTROL

# 9Z WC2

## 9-CHANNEL COMPUTER SYSTEMS



Includes  
**SANYO**  
Batteries



Stock #	System	Modulation	Bands	Tx Module	Servos	Receiver	Rx NiCd	Tx NiCd
FUTJ9000	9ZA WC2	PCM	50, 72	—	—	—	NR4F 1500mAh	NT8S 1100mAh
FUTJ9560	9ZA WC2	PCM	72	TK-FSS	—	R309DPS	NR4F 1500mAh	NT8S 1100mAh
FUTJ9100	9ZH WC2	PCM	50, 72	—	—	—	NR4F 1500mAh	NT8S 1100mAh
FUTJ9660	9ZH WC2	PCM	72	TK-FSS	—	R309DPS	NR4F 1500mAh	NT8S 1100mAh

## The world's most powerful radio systems

Like the pilots who use them, 9Z World Championship 2 systems represent R/C's elite. Their precision is unmatched, their performance is uniformly flawless and their potential to astound, virtually unlimited. The pilot can specify up to 8 flight conditions per model, a set-up refinement that can unlock a plane's full potential or set up a routine's final piece de resistance with a simple touch of a switch. Transmitter-only versions offer the pilot the possibility to utilize Futaba's existing receivers and Tx modules, while synthesized versions offer the enviable ability to fly on any 72MHz channel. And with both, servo choices are the pilot's sole prerogative.

### 9Z WC2 Specifics

- Airplane software offers 3 wing types and a unique "ailevator" mix, plus 7 programmed functions and 5 "free" mixes
- Heli software includes gyro sensitivity and governor mixing features, plus 5 "free" mixes and 8 programmed functions
- Sailplane software allows for butterfly and V-tail mixes, plus 7 "free" mixes and 6 programmed functions which include Start Offset & Speed Offset.
- Tachometer reads 1-6 blades, 0-50,000 rpm
- Voltmeter features simulated load
- Auto power-down settable for 10, 20, 30 or 40 minute delays
- Switch control of engine cut-off leaves trim setting intact
- Fail Safe/Hold & Low Voltage Alarms automatically move servos to user-preset positions



### 9Z WC2 System Overview:

- "Stepless" 1024 Resolution
- Assignable Switches
- "Full Functionality" Trainer System
- Software for Airplanes, Sailplanes & Helis
- 10-Model Memory, Expandable w/CAMPac Data Storage Module
- 8 Programmable Flight Conditions/Model
- 5 Programmable Mixes/Model
- 8-Character Model Naming
- LCD w/Adjustable Screen Contrast
- Digital Trims w/Adjustable Rates
- Digital Subtrims (All Channels)
- Servo Centering/Reversing/End Point Adjustment
- Direct Servo Control
- PPM/PCM Operation
- Fail Safe
- Rx and Tx NiCds w/Dual-Output Charger
- Constant Trim, Voltage, Name and Timer Display
- Digital Voltmeter
- Digital Tachometer
- Auto Power-Down
- Independent, Dual Count Up/Down Timers
- Elapsed Time Counter
- Swiveling Antenna
- Dual or Triple Rates (Elevator/Aileron/Rudder)
- Exponential (Elevator/Aileron/Rudder/Throttle)
- Throttle Cut and Idle Down
- Adjustable Travel Limiter (ATL)
- Ball-Bearing Sticks w/Length & Tension Adjustments
- Low-Voltage & Special Mixer Alarms



- Deluxe Carrying Case (FUTM5701)

## 9ZH WC2 Helicopter Systems

The 9ZH and 9ZHS offer traditional heli system control layout, a non-ratcheted throttle and these programmable, heli-specific features:

- Dual-Mode Gyro
- U-Shaped Throttle Curve
- Idle-Up (3)
- CCPM Mixing (5)
- Gang Mixing

### CAMPac Data Storage Module (64K)

Simple, plug-in module provides data storage for up to 16 more models. (FUTM9400)



# 9C

## 9-CHANNEL COMPUTER SYSTEMS

with 16K CAMPac



**The Innovative Dial 'n Key System: Computer Programming at its simplest!**  
*Just rotate the dial to find the program you want. Press the dial to open it and use the dial and cursor keys to set values.*

Stock #	System	Modulation	Bands	Tx Module	Servos	Rx	Rx NiCd	Tx NiCd
FUTJ75**	9CAF	FM	50,72	TP-FM	—	R148DF	NR4J 600mAh	NT8S700B 700mAh
FUTJ76**	9CHF	FM	50,72	TP-FM	—	R148DF	NR4RB 1000mAh	NT8S700B 700mAh
FUTJ77**	9CAP	PCM	50,72	TP-FM	—	R149DP	NR4J 600mAh	NT8S700B 700mAh
FUTJ78**	9CHP	PCM	50,72	TP-FM	—	R149DP	NR4RB 1000mAh	NT8S700B 700mAh
FUTJ85**	9CAF	FM	50,72	TP-FM	(4)S3004	R148DF	NR4J 600mAh	NT8S700B 700mAh
FUTJ86**	9CHF	FM	50,72	TP-FM	(4)S3001	R148DF	NR4RB 1000mAh	NT8S700B 700mAh
FUTJ87**	9CAP	PCM	50,72	TP-FM	(4)S3001	R149DP	NR4J 600mAh	NT8S700B 700mAh
FUTJ88**	9CHP	PCM	50,72	TP-FM	(4)S9001	R149DP	NR4RB 1000mAh	NT8S700B 700mAh
FUTJ89**	9CAP	PCM	75	TJ-FM	(2)S3004	R138DP	NR4J 600mAh	NT8IB 600mAh

## Sophisticated systems for flight and surface use.

Ask modelers about the 9C's best feature, and you'll hear varying opinions. To some, it's the amazing depth and breadth of the things it can do. To others, it's the ability to tap the 9C's full potential with the ease of "Dial & Key" programming. For still others, it's what the 9C surface system can do for robots, huge sailing models and more. But now that a 16K CAMPac Module is a standard 9C feature, all modelers can agree on at least one thing: Futaba's 9C delivers more value and versatility for the dollar than ever before.

## 9C Specifics

- Airplane software offers 3 wing types and a unique "ailevator" mix, plus 7 programmed functions and 7 "free" mixes\*
- Heli software includes gyro sensitivity and governor mixing features, plus 3 "free" mixes and 6 programmed functions\*
- Sailplane software allows for butterfly and V-tail mixes, plus 7 "free" mixes and 6 programmed functions\* that include Start Offset & Speed Offset
- Servo Test Function shows travel of all 8 servos as they cycle through their limits when "On", allows verification of set-ups/mixes when "Off"
- Auxiliary Channel Screen enables you to reassign functions in a single step
- Slider Switches are assignable to any switch/auxiliary channel function
- Throttle and Pitch Curves can be programmed for up to 5 values
- Square Micro Trainer Plug provides extra plug/port protection

\* Using "Advanced" Menu.

## 9C System Overview:

- 9 Channels (PCM Mode)  
8 Channels in FM Mode
- "Dial & Key" Programming
- 2 Proportional Slide Switches
- Assignable Switches
- "Full Functionality" Trainer System
- Software for Airplanes, Sailplanes and Helis
- Basic and Advanced Menus
- 8-Model Memory, Expandable w/CAMPac Data Storage Module (included)
- 8-Character Model Naming
- 128 x 64 LCD w/Adjustable Screen Contrast
- Digital Trims w/Adjustable Rates
- Digital Subtrims (All Channels)
- Electronic Servo Centering/Reversing/End Point Adjustments
- Direct Servo Control
- PPM/PCM Operation, Fail Safe (PCM Mode only)
- Rx and Tx NiCds w/Dual-Output Charger
- Constant Trim, Voltage, Name and Timer Display
- Independent, Dual Count Up/Down Timers
- Elapsed Time Counter
- Dual or Triple Rates (Elevator/Aileron/Rudder)
- Exponential (Elevator/Aileron/Rudder/Throttle)
- Throttle Cut & Idle-Down
- Adjustable Trim Limiter (ATL)
- Ball Bearing Sticks w/Length & Tension Adjustments
- Low Voltage and Special Mixer Alarms



Slider switches on both sides of the case can be used without taking your thumbs off the sticks or your eyes off the action. Sound cues confirm servo center.

All 9C systems now include a 16K CAMPac Data Storage Module, which adds 6-model memory to the 8-model memory built-in — memory for 14 models in all!



## 9CH Helicopter Systems

With 9CH heli systems, you can program a: 1) level of gyro sensitivity; 2) governor speed; and 3) rate of servo travel for up to 4\* conditions — and let the 9C automatically change settings when you change conditions. Non-ratcheted throttle and traditional heli control layout featured.

\*5 conditions on gyro sensitivity.



## 9C Surface System



9C surface system offers all of the programming ease and versatility of 9C flight systems on 75MHz with PCM accuracy. Ideal for battling robots, marine masterpieces, big rigs and super-sized custom control applications.

# 6EXA

## 6-CHANNEL COMPUTER SYSTEM



### A first computer radio - one great value.

The 6EXA is a great introduction to computer radios and an even better example of the phrase "getting the most for your money." It offers far more than a simple 4-channel system, far more programming ease than you'd ever hoped for — and does it all for less than you could have possibly imagined.

Simple "go-with-the-flow" routines use a big, bright 40-segment LCD to show the shortest and most direct route to each feature. Combine that with two buttons and a data input lever, and the 6EXA becomes a way to accomplish the formerly impossible — a way to lock precise set-ups in multi-model memory with digital accuracy and utter simplicity.



4x



The LCD provides an easy, step-by-step guide to programming and confirmation of every setting. It's all done with just the "Mode" and "Select" buttons and the data input lever.



A flap lever enhances fine control and makes the flap knob easy to find with fingers alone.



Press and hold the trainer switch, and it activates the trainer system. Press and release it twice in one second, and it's a throttle cut switch!

### 6EXA System Overview

- Easy Programming
- 6-Model Memory
- 241-Position Digital Trims (Throttle/Rudder/Elevator/Aileron)
- EPA and Servo Reversing (All Channels)
- Dual Rates and Exponential (Aileron/Elevator)
- Simple, 2 Button/ 1 Lever Set-Up
- 4 Programmed Wing Mixes
- 1 "Free" Mix
- Trainer System/ Throttle Cut Switch
- Flap Knob (proportional)
- Retract Switch
- Stick Mode Selection
- Dual-Conversion Receiver
- Ball Bearing Servos (4)
- Tx and Rx NiCds w/Dual-Output Charger
- Audible Low Battery Alarm
- Sticks w/Length Adjustment

### 6EXA System Specifics

- Wing mixes include flaperon, V-tail, flaperon/V-tail and elevon (delta mixing)
- Sticks can be programmed for modes 1-4
- Dual rates and exponential are controlled with a single switch

Stock#	System	Modulation	Bands	Servos	Receiver	Rx NiCd	Tx NiCd
FUTK55**	6EXA	FM	72MHZ	(4) S3004	R127DF	NR4J 600mAh	NT8F600B 600mAh

# 6X SUPER 6-CHANNEL COMPUTER SYSTEMS



## The ultimate in 6-channel radio reception.

Give yourself an edge — with the only 6-channel system that features full-time, stepless 1024 PCM technology. The 6XHPS for helis and 6XAPS feature the sophisticated R138DP 8-channel receiver that allows you to enjoy narrow-band spacing and dual conversion signal filtering, for exceptionally clear, interference-free reception and amazingly smooth, accurate control.

## 6X Series Overview

- 6-Model Memory
- Acro and Heli Software
- 128-segment LCD Screen
- Switchable and Variable Rate Channel Control
- Electronic Trim
- Dual Rates (2-3 channels)
- Exponential (4 channels)
- Servo Reversing (All channels)
- PCM Fail Safe
- Trainer System
- Proportional Flap Channel
- Retract Switch
- Programmable Mixing; Flap Trims, Air Brake, V-Tail Mixing
- Elevon
- Rx and Tx NiCds w/Dual Output Charger

Includes  
**SANYO**  
Batteries



4x

Stock#	System	Modulation	Bands	Servos	Receiver	Rx NiCd	Tx NiCd
FUTK34**	6XAS	FM	50,72	(4)S3004	R127DF	NT4J 600mAh	NT8JY 600mAh
FUTK32**	6XAPS	PCM	72	(4)S3004	R138DP	NR4J 600mAh	NT8JY 600mAh
FUTK35**	6XAPS	PCM	75	(2)S3004	R138DP	NT4J 600mAh	NT8JY 600mAh
FUTK31**	6XHS	FM	50,72	(4)S148	R127DF	NR4RB 1000mAh	NT8JY 600mAh
FUTK33**	6XHPS	PCM	72	(4)S148	R138DP	NR4RB 1000mAh	NT8JY 600mAh

## 6XHS & 6XHPS Heli Systems

All of the same functions of the 6XAS and 6XAPS, with these additional features for heli pilots:

- Hover-Pitch
- Idle Up
- Throttle Hold
- Hover-Throttle
- Pitch EPA
- Rudder Offset
- Revo-Mix



# 6VH

## 6-CHANNEL HELI SYSTEM



### Digital precision - screwdriver simplicity

To heli pilots more at ease with pots than programming codes, the 6VH represents the perfect blend of simple use and sophisticated performance. A state-of-the-art microprocessor allows pitch curve, throttle hold revolution mixing, idle-up, dual rates and AST values to be fine-tuned to the peak of digital precision, using only the included screwdriver and simple pots and switches.

### 6VH Overview

- Trainer System
- Rotary knob on Channel 6 offers simple adjustment of hover pitch or gyro sensitivity
- Transmitter Low Battery Alarm
- Adjustable Electronic Trims
- Dual Output Charger

### Screwdriver-adjustable

- All-Channel Servo Reversing
- Servo Travel (AST)
- Dual Rates on Elevator & Aileron
- Pitch Curve
- Throttle Hold
- Idle Up



4x

Stock#	System	Modulation	Bands	Servos	Receiver	Rx NiCd	Tx NiCd
FUTK23**	6VH	FM	72	(4)S148	R127DF	NR4RB 1000mAh	NT8IB 600mAh

# 6YG

## 6-CHANNEL AIRPLANE SYSTEM



### A great way to start out - or move up!

Advanced ergonomics make the 6YG a pleasure to hold. Thoughtful refinements also make it one of the easiest 6-channels to use. Twin pots establish high and low throttle settings with electronic ease, and without mechanical linkages. Dual rates on elevator and aileron are adjustable independently, but controlled by a single switch.

### 6YG Overview:

- Throttle EPA
- Proportional Flap Channel w/Adjustment Knob
- All-Channel Servo Reversing
- ON/OFF Retract Channel
- Dual Output Charger
- Trainer Port
- Adjustable Electronic Trims
- Battery Meter



4x

Stock#	System	Modulation	Bands	Servos	Receiver	Rx NiCd	Tx NiCd
FUTJ63**	6YG	FM	72,75	(4)S3004	R127DF	NR4J 600mAh	NT8F600B 600mAh



# 4YF

## 4-CHANNEL SYSTEM



### A new look at low-cost sport/start-up systems

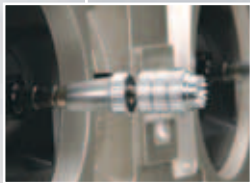
Whether you're a newcomer or a long-time sport pilot, finding a 4-channel system that offers the most for the least takes a surprising short time — especially if you start by looking at the 4YF. It offers the basics of 4-channel control and the ease and economy of NiCd batteries at a price that makes Futaba quality easy to afford.

### 4YF System Overview

- FM Signal Clarity
- Dual-Conversion FM Receiver
- Ergonomic, Slim-Line Case
- Trainer System
- Ball Bearing S3004 Servos (4)
- Spring-Loaded Trainer Switch
- Red/Green Battery Status LEDs
- Knurled Sticks w/Length and Tension Adjustments
- Tx and Rx NiCds w/Dual-Output Charger
- Servo Reversing (All Channels)
- Electronic Trims (All Channels)
- Removable Antenna



The trainer button has been replaced by a toggle switch that's easier to hold down and spring-loaded to turn off the instant it's released.



Stick length and tension can be adjusted to pilot preference. Knurled tips provide a more tactile feel and better grip.



A right-angle bend and rims around the trainer system plug and port provide strength, reliability and added protection against damage. The port is in the middle of the back panel, to equalize cord weight and keep the cord clear of the controls

Stock#	System	Modulation	Bands	Servos	Receiver	Rx NiCd	Tx NiCd
FUTJ40**	4YF	FM	72, 75MHz	(4)S3004	R127DF	NR4QB 600mAh	NT8JY 600mAh

# 3FR 3-CHANNEL SYSTEM



## Single stick simplicity for sport!

The 3FR offers more than ease and economy — it puts a whole new slant on single-stick design. Mixing is available at the flip of a switch. The case shape and control placement take full advantage of the hand's natural mechanics. Weight is distributed evenly for light, comfortable use. The AM version is a natural match for sailplanes and large electrics — the all-NiCd FM version, a logical, weight-conscious choice for park and indoor flyers. And in both cases, an exceptionally low price makes it a perfect fit for any pilot's budget.

## 3FR System Overview:

- V-Tail Mixing (On/Off)
- Single-Stick Control (Aileron, Elevator)
- Proportional 3rd Channel (Throttle, Spoiler or Flaps)
- Servo Reversing (Aileron, Elevator)
- Trims (Aileron, Elevator)
- Easy-to-read LED battery status indicator
- NiCd Charge Jack (NiCds optional on FUTJ51\*\*)
- Battery Status LEDs
- Rx battery box, removable antenna, frequency flags, servo horns & hardware, and instruction manual

Includes  
**SANYO**  
Batteries



An inward curve and molded-in recess provide a solid grip during launches and guide your thumb to the slider switch. Ideal for throttle, flaps or spoilers.



In addition to servo reversing, the 3FR also offers mixing. Great for elevons, V-tails and Great Planes® Slinger ARF flying wing!

Stock#	System	Modulation	Bands	Servos	Receiver	Rx NiCd	Tx NiCd
FUTJ51**	3FR	AM	27,72	(2)S3003	R114H	—	—
FUTJ52**	3FR	FM	72	(2)S3106	R114F	NR4K 250mAh	NT8JY 600mAh

NOTE: The 3FR FM should not be used on 72MHz low-band channels 11-15.

# 2ER & 2VR 2-CHANNEL SYSTEM

For some modelers, using two hands to control two radio channels just feels right — which makes these 2-stick systems a perfect choice. Ideal for operating R/C boats and vehicles, the 2ER and 2VR are also great for sailplanes.



## 2ER and 2VR System Overview

- 2-Channel Servo Reversing
- Conveniently located Steering and Throttle Trims
- Case with molded-in carrying handle and “feet” for stability
- LED Battery Status Indicator

## 2ER System Specifics

- Ergonomic Transmitter Case
- Shorter sticks allow smaller hands a full range of movement
- Controls and lights are placed within a 5" x 2" area to focus attention

## 2VR System Specifics

- 72MHz version includes battery box for sailplane use
- Includes audible and visible battery level indicators

Stock#	System	Modulation	Bands	Servos	Receiver
FUTJ46**	2ER	AM	72	(2)S3003	R122JE
FUTJ47**	2ER	AM	27,75	(2)S3003	R122JE
FUTK06**	2VR	AM	72	(2)S3003	R122JE
FUTK07**	2VR	AM	75	(2)S3003	R122JE
FUTK12**	2VR	AM	75	(1)S3003 (1)S3802	R122JE
FUTK13**	2VR	AM	75	(1)S3003 (1)S3801	R122JE
FUTJ60**	4VWD	AM	27	(2)S3003	R114H



# 4VWD 4-CHANNEL SURFACE SYSTEM

Add functions (and fun) to your surface model with the 4VWD. Engage your robot in exciting combat or enhance the realism of a sailboat. A special “gate” is included that replicates the gear-shifting pattern of tanks.



## 4VWD System Overview

- 4-Channel Trims and Servo Reversing
- Adjustable Stick Length and Tension
- Battery Power Status Meter

# 3PK 3-CHANNEL COMPUTER SYSTEMS



*Mounted in the rear, the 3PK's custom LCD is perfectly positioned for instant reference and easy programming.*



*With the Advanced Positioning Adapter, the wheel can be dropped or rotated to achieve perfect "feel" in seconds.*

Stock #	System	Modulation	Bands	Tx Module	Servos	Receiver	Rx NiCd	Tx NiCd
FUTJ32**	3PK	FM/HRS	27,75	PK-27	—	R203HF	—	—
FUTJ33**	3PK	PCM	27,75	PK-27	—	R113iP	—	NT8F700B 700mAh

Both models require 6.0V Rx power and servos. FUTJ32\*\* requires digital servos.

## Twice the speed. All the bells & whistles. No equals.

In top-level racing, speed and accuracy are *everything*. With the 3PK in hand, you have everything you need to get the jump on the competition.

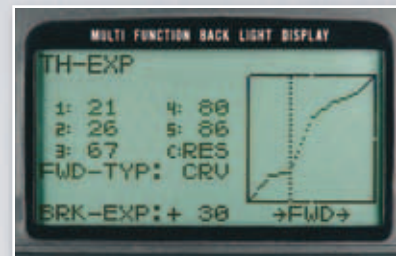
Combine a 3PK transmitting in High Response Speed (HRS) mode with an R203HF receiver and digital servos, and you have a racing system capable of reacting at *twice*

the speed of other systems — a breakthrough so phenomenal that it required the creation of MC Set-Up feature just to bring existing ESCs “up to speed.”

The 3PK is the only radio that can put HRS mode — and a vast armory of programmable, competitive potential — within easy reach of the serious racer.

### 3PK System Overview

- Expandable, 10-Model Memory
- 10-Character Model Naming
- Model Copy, Clear and Reset
- Assignable Switches and Dials
- Digital Trims and Dials
- Automatic Trim and Dial Memory
- “New Driver”, “Race-Ready” and “Expert” Menus
- “MC Set-Up” (adapts ESCs to higher HRS frame rates)
- “Adjuster” (restores electronics to original Factory Default)
- “Direct Select” (2-button access to 6 chosen programming functions)
- Backlit, Rear-Mounted 128 x 64 LCD w/Adjustable Contrast
- Advanced Positioning Adapter (APA)
- 2 “Free” Programmable Mixes
- Subtrims (All Channels)
- Servo Reversing (All Channels)
- EPA (All Channels)
- Fail Safe and Battery Fail Safe (HRS & PCM Modes only)
- Right-/Left-Hand Conversion
- DSC (Direct Servo Control)
- Exponential (Steering/Throttle)
- Adjustable Servo Speed (Steering/Throttle)
- Up/Down, Lap & System Timers
- ATL (Electronic & Mechanical)
- Traction Control/Acceleration Rate (Throttle)
- Fail Safe and Auto Start (Throttle)
- ABS (Anti-Skid Brake System)
- Idle-Up



The 128 x 64 (2.5" x 1.25") dot LCD screen provides crisp definition of each number, letter and graph. Backlighting and adjustable contrast maximize visibility in all light conditions.

### 3PK Specifics

- Up/Down Timers w/Stop and Restart
- Lap Timer features 100 lap memory
- Navigation Lap Timer sounds when target lap time is exceeded
- ABS pulse rate can be set for Slow, Mid or Fast
- “New Driver” Menu offers 12 functions; “Race-Ready” adds 10 new functions; “Expert” adds 9 new functions to “Race-Ready.”
- Servo Display Screen shows set-ups/mixes for individual servos. (Expert Menu.)
- Throttle programming options include 5-point curve, Expo & VTR



FUTJ32\*\* includes the R203HF, the only receiver capable of processing signals at the HRS rate — a combination which allows the racer to harness the full speed and accuracy of digital servos.



With a 16K CAMPac Data Storage Module, you can store up to 8 set-ups for copying, storage or transfer to another system. Optional; sold separately. (FUTM9405)

# 3PDF-X

## 3-CHANNEL COMPUTER SYSTEM



The rocker switch for the 3rd channel offers a choice of linear (proportional) mode and 4 pre-set modes (Position) — 5 in all. Ideal for adding convenience or optimizing performance.



Rocker switches for throttle ATL and Steering Dual Rates are just above the grip, within easy thumb's reach. Sound cues signal changes in value, so settings can be adjusted by ear, while your eyes remain on-track.

### A giant step forward in ease and opportunity

When you've outgrown the radio that came with your RTR, the time is right for the 3PDF-X.

Set-up instructions show you how the programmable 3rd channel can be used to shift your T-Maxx® smoothly into reverse, activate a starter or adjust fuel mix. Four push-buttons provide an easy and digitally precise way to unlock your model's full performance with EPA, dual rates and more — and then store hard-won settings in 3-model memory. And price makes all of the above affordable for competitive car and boat modelers.

### 3PDF-X System Overview

- 3-Model Memory
- Programmable 3rd Channel
- Digital Trims
- ATL (Brake; Programmable & Mechanical)
- EPA (Steering/Throttle)
- Exponential (Steering/Throttle)
- Servo Reversing (Steering/Throttle)
- Dual Rates (Steering)
- Low-Battery Alarm
- FM Signal Technology
- 16-Character LCD
- NiCd Charge Jack (for optional NiCds)
- Padded Hand Grip

### 3PDF-X Specifics

- Three-way power awareness! An LED to show that power is on, the LCD displays voltage constantly — and flashes an alarm when it drops dangerously low
- Programmable ATL electronically sets travel limits for the throttle servo — mechanical ATL physically changes the amount of travel available for throttle and brake
- Includes battery box, switch harness, frequency flag and manual

Stock #	System	Modulation	Bands	Servos	Receiver
FUTJ34**	3PDFX	FM	27,75MHz	—	R133F

# 2PH, 2PHKA & 2PEKA 2-CHANNEL SYSTEMS



2PHKA



*Fine-tuning for trims is done with flat dials that are recessed to make accidental contact less likely.*

## The Basics - and Beyond

There's no denying that a good, basic 2-channel AM pistol is a great place for a first-time modeler to start out. And it's not a bad place for a long-time modeler to end up, either. Both can appreciate the durability and value that the 2PH and 2PHKA represent, as well as the easy way they feel in the hand and fit into a budget. And modelers of all skill levels can benefit from the versatility and different capabilities of 2PH and 2PHKA systems, and the wide variety of applications they can meet.

## 2PH & 2PHKA Am System Overview:

- Durable composite case has an ergonomic design for modeler comfort
- A wide, flat base distributes battery weight for stability and balanced handling
- A heavy-duty wheel post and high, surrounding collar provide a more solid feel
- A smoked panel over the servo reversing switches and battery LED offers quick access and solid protection

## 2PHKA extras offer increased versatility:

- EPA on Throttle and Steering
- Adjustable Dual-Rate Steering
- Built-in charging jack for optional NiCd use

## 2PEKA FM System



*Enhances 2PHKA features with FM signal technology provided by an R123F 3-channel receiver.*

Stock#	System	Modulation	Bands	Servos	Receiver	ESC
FUTJ12**	2PH	AM	75	(1)S3003,(1)S3010	R122JE	—
FUTJ13**	2PH	AM	75	(1)S3003	R122JE	—
FUTJ14**	2PH	AM	27,75	(2)S3003	R122JE	—
FUTJ15**	2PH	AM	27,75	(1)S3003	R122JE	MC230CR
FUTJ58**	2PH	AM	75	(1)S3003	R122JE	Novak Explorer II
FUTJ17**	2PHKA	AM	75	(1)S3003	R122JE	—
FUTJ18**	2PHKA	AM	27,75	(2)S3003	R122JE	—
FUTJ19**	2PHKA	AM	27,75	(1)S3003	R122JE	MC230CR
FUTJ27**	2PEKA	FM	75	(2)S3003	R123F	—

# 2PL

## 2-CHANNEL COMPUTER SYSTEMS



### The 2-channel digital with 1-button programming!

Cars, boats, trucks of all types — any surface model can benefit from the sophistication and simplicity the 2PL offers. As a sport system, it puts the set-up precision and versatility of computer technology in your hands at a surprisingly low price. And as a computer system, it offers revolutionary programming that replaces complicated controls and routines with push-button ease and an easy-to-follow path.

### 2PL System Overview

- AM Modulation
- 1-Button Function Selection
- 10-Model Memory
- 3 Character Model Naming
- 64-Character LCD
- Digital Trims (Steering/Throttle)
- Dual Rates (Steering)
- EPA (Steering/Throttle)
- ABS Braking (Throttle)
- Servo Reversing (Steering/Throttle)
- Low-Battery & "Error" Alarms
- NiCd Charging Jack (NiCds optional)
- R142JE BEC Receiver



A push brings up the opening screen; additional pushes take you through the menu to the function you want. Set values with the digital trims, and you're done.



Strategically located, the steering rate switch makes quick adjustments possible, even while driving. Great for establishing solid mid-range control for better cornering.



Trim settings show the direction (Left/Right) and distance from center (0).

The 2PL signals each change in number with a beep — and signals servo center/neutral with two beeps.

### 2PL Specifics

- Battery Voltage displayed on opening screen — "Low Battery" alarm appears when voltage drops below safe levels
- Holding Edit Key down for 2+ seconds returns user to opening screen
- Trims can be adjusted at any time — not just in menu.
- ABS Braking can be set for Slow, Mid or Fast "pulse" rates — or turned off
- EPA (End Point Adjustments) to limit servo travel can be made to both sides of neutral

Stock #	System	Modulation	Bands	Servos	Receiver	ESC
FUTK01**	2PL	AM	75MHz	(1) S3003	R142JE	—
FUTK02**	2PL	AM	27,75MHz	(2) S3003	R142JE	—
FUTK03**	2PL	AM	75MHz	(1) S3003	R142JE	MC230CR



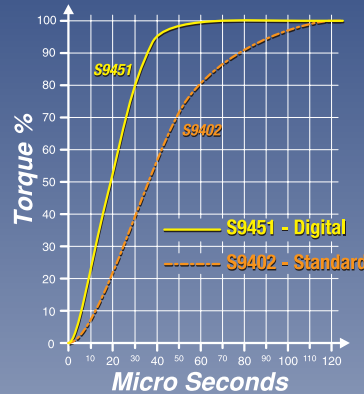
# DIGITAL SERVOS

## The Pulse Rate of Premium Precision, Power & Performance

By the time a standard servo can react to one signal pulse, the microprocessors in a Futaba Digital Servo have already processed and responded to five more.

A digital servo's signal pulse rate is FET-assisted, and six times faster than a standard servo's rate — a difference that accounts for its virtually instantaneous response, nearly undetectable deadband and frankly enviable abilities to hold a control surface without wavering or fading and come back on-center with amazing ease and absolute accuracy.

Digital and Standard Servo Comparison



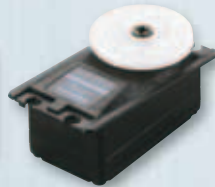
Both servos shown have the same specifications — but the digital servo supplies greater torque toward the center, with more holding power and more accurate positioning.



S5050 High Torque

Volts	Torque	Speed
4.8V	211.0 oz/in	0.25 sec/60°
6.0V	263.7 oz/in	0.20 sec/60°
Dimensions	Weight	
2.4 x 1.2 x 2.0 in	4.5 oz	

FUTM0255



S9150 Low-Profile Aileron

Volts	Torque	Speed
4.8V	80.5 oz/in	18 sec/60°
6.0V	n/a	n/a
Dimensions	Weight	
1.9 x 1.1 x 1.0 in	1.9 oz	

FUTM0210



S9151 Rudder

Volts	Torque	Speed
4.8V	131.9 oz/in	0.19 sec/60°
6.0V	n/a	n/a
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.8 oz	

FUTM0211



S9250 Heli

Volts	Torque	Speed
4.8V	76.3 oz/in	0.11 sec/60°
6.0V	n/a	n/a
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.9 oz	

FUTM0220



S9251 for GY601 Gyro Only

Volts	Torque	Speed
4.8V	51.4 oz/in	0.07 sec/60°
6.0V	n/a	n/a
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	2.0 oz	

FUTM0221



S9252 All-Purpose

Volts	Torque	Speed
4.8V	91.6 oz/in	0.14 sec/60°
6.0V	n/a	n/a
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.8 oz	

FUTM0222



S9253 Heli Rudder

Volts	Torque	Speed
4.8V	27.8 oz/in	0.08 sec/60°
6.0V	n/a	n/a
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.7 oz	

FUTM0223



S9350 High Torque

Volts	Torque	Speed
4.8V	111.0 oz/in	0.15 sec/60°
6.0V	138.8 oz/in	0.12 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.4 in	1.4 oz	

FUTM0235



S9351 High Torque

Volts	Torque	Speed
4.8V	n/a	n/a
6.0V	180.5 oz/in	0.15 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	2 oz	

FUTM0236



S9451 High Torque/High Speed

Volts	Torque	Speed
4.8V	96.6 oz/in	0.13 sec/60°
6.0V	120.8 oz/in	0.10 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.4 in	2.0 oz	

FUTM0241



S9550 Low Profile

Volts	Torque	Speed
4.8V	66.6 oz/in	0.14 sec/60°
6.0V	83.3 oz/in	0.11 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.0 in	1.6 oz	

FUTM0250



S9650 Mini

Volts	Torque	Speed
4.8V	50.0 oz/in	0.14 sec/60°
6.0V	62.5 oz/in	0.11 sec/60°
Dimensions	Weight	
1.4 x 0.6 x 1.1 in	0.9 oz	

FUTM0260

Note: For servo application chart, see page 19.

# SERVOS

## Power and speed for every R/C application.

At Futaba, the application is king — one good reason why more modelers turn to Futaba first for their servo needs. And whether the application requires special sizes, specific torques, better mesh, smoother operation or faster speed, there's a Futaba Servo to meet it — and impact- and fuel-resistant case to protect your investment.



**S136G Compact Retract 180°**

Volts	Torque	Speed
4.8	91.6 oz/in	0.58 sec/60°
6.0	n/a	n/a
Dimensions	Weight	
1.8 x 0.9 x 1.0 in	1.5 oz	

FUTM0670



**S148 Precision**

Volts	Torque	Speed
4.8	44.4 oz/in	0.23 sec/60°
6.0	56.9 oz/in	0.19 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.4 in	1.6 oz	

FUTM0710



**S3001 Standard**

Volts	Torque	Speed
4.8	44.4 oz/in	0.23 sec/60°
6.0	56.9 oz/in	0.19 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.4 in	1.6 oz	

FUTM0029



**S3002 Mini**

Volts	Torque	Speed
4.8	52.7 oz/in	0.26 sec/60°
6.0	63.8 oz/in	0.21 sec/60°
Dimensions	Weight	
1.2 x 0.6 x 1.2 in	1.2 oz (37g)	

FUTM0030



**S3003 Standard**

Volts	Torque	Speed
4.8	44.4 oz/in	0.23 sec/60°
6.0	56.9 oz/in	0.19 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.4 in	1.3 oz	

FUTM0031



**S3004 Standard**

Volts	Torque	Speed
4.8	44.4 oz/in	0.23 sec/60°
6.0	56.9 oz/in	0.19 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.4 in	1.3 oz	

FUTM0004



**S3010 Standard**

Volts	Torque	Speed
4.8	72.2 oz/in	0.20 sec/60°
6.0	90.2 oz/in	0.16 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.4 oz	

FUTM0043



**S3101 Micro Precision**

Volts	Torque	Speed
4.8	34.7 oz/in	0.18 sec/60°
6.0	43.4 oz/in	0.14 sec/60°
Dimensions	Weight	
1.1 x 0.5 x 1.2 in	0.6 oz (17g)	

FUTM0033



**S3102 Aircraft Micro**

Volts	Torque	Speed
4.8	51.4 oz/in	0.26 sec/60°
6.0	64.2 oz/in	0.20 sec/60°
Dimensions	Weight	
1 x 0.5 x 1.2 in	0.7 oz (21g)	

FUTM0034



**S3103 Micro Mini**

Volts	Torque	Speed
4.8	16.7 oz/in	0.11 sec/60°
6.0	20.8 oz/in	0.09 sec/60°
Dimensions	Weight	
0.9 x 0.4 x 0.8 in	0.3 oz (9.5g)	

FUTM0037



**S3104 1/4 Scale**

Volts	Torque	Speed
4.8	127.7 oz/in	0.21 sec/60°
6.0	n/a	n/a
Dimensions	Weight	
2.4 x 1.2 x 2.0 in	3.4 oz	

FUTM0036



**S3107 Micro**

Volts	Torque	Speed
4.8	16.7 oz/in	0.12 sec/60°
6.0	n/a	n/a
Dimensions	Weight	
0.9 x 0.4 x 0.8 in	0.3 oz (9g)	

FUTM0025



**S3302 1/4 Scale**

Volts	Torque	Speed
4.8	89	0.24 sec/60°
6.0	162.4 oz/in	0.18 sec/60°
Dimensions	Weight	
2.4 x 1.2 x 2.0 in	3.6 oz	

FUTM0035



**S3305 Standard High Torque**

Volts	Torque	Speed
4.8	98.8 oz/in	0.25 sec/60°
6.0	123.4 oz/in	0.20 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.6 oz	

FUTM0045



**S3401 High Speed Car**

Volts	Torque	Speed
4.8	35.5 oz/in	0.19 sec/60°
6.0	44.4 oz/in	0.15 sec/60°
Dimensions	Weight	
1.6 x 0.8 x 1.5 in	1.7 oz	

FUTM0040



**S3801 High Torque Sail**

Volts	Torque	Speed
4.8	155.5 oz/in	0.33 sec/60°
6.0	194.3 oz/in	0.26 sec/60°
Dimensions	Weight	
2.4 x 1.2 x 2.0 in	3.8 oz	

FUTM0038



**S3802 Sail**

Volts	Torque	Speed
4.8	122.1 oz/in	0.70 sec/60°
6.0	152.7 oz/in	0.56 sec/60°
Dimensions	Weight	
1.8 x 0.9 x 1.7 in	2.6 oz	

FUTM0039



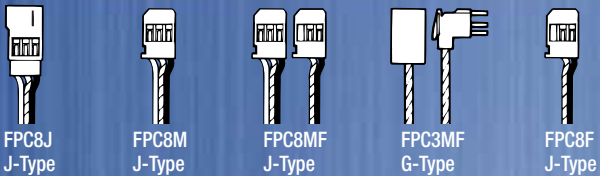
## SERVO HARDWARE

Stock #	Part #	Style/Application
FUTM2040	FSH11	Horn Screws & Washers (10)
FUTM2250	FSH32	Mounting Screws & Washers (10)
FUTM2260	FSH41	Horn Screw – 28/29/30/31/32 (10)
FUTM2265	FSH49	Horn Screw for Metal Gear (10)
FUTM2270	FSH44	Horn Screw S33 (10)
FUTM2275	FSH55	Horn Screw S3103 (10)
FUTM2280	FSH51	Self Tap Screw M2.6X10 (10)
FUTM2285	FSH52	Horn Screw M2X6 S125 (10)
FUTM2290	FSH53	Self Tap Screw M3X8 S9150 (10)
FUTM2295	FSH57	Horn Screw S9550 (10)
FUTM2360	FSH9150	Accessory Pack S9150
FUTM3551	FSH50	Accessory Package S3003
FUTM3552	FSH33	Accessory Package S125
FUTM3635	J55043	Ratchet Screw (1) 2DR/VR/CR
FUTM2310	FSH10	Grommets Round (20)
FUTM2320	FSH20	Grommets Square (20)
FUTM2340	FSH40	Grommets Rectangular (20)
FUTM2345	FSH54	Grommets S9150 (10)
FUTM2346	FSH46	Grommets S134/3302 (20)
FUTM2347	FSH47	Eyelets S134/3302 (20)
FUTM2348	FSH48	Grommets Split (20)
FUTM2350	FSH3103	Accessory Package S3103
FUTM3650	FSH21	Eyelets – Brass (20)



## SERVO CONNECTORS

Stock #	Part #	Style/Application	Length
FUTM3720	FPC8J	J-Type Female Connector	12 in
FUTM3730	FPC8M	J-Type Servo Male Connector	12 in
FUTM3740	FPC8MF	J-Type Servo/Nicd Male Connectors	12 in
FUTM3810	FPC3MF	G-Type Male/Female Servo Connectors	6 in
FUTM3820	FPC8F	J-Type Nicd Male Connector	3 in



## SERVO TRAYS

Stock #	Part #	Style/Application
FUTM2670	FST28T	Standard Tray 2+1 S/48/148/3003
FUTM2680	FST28V	Single Vertical Tray S148/3003



FST28T



FST28V

## GEAR SETS

## CASE SETS

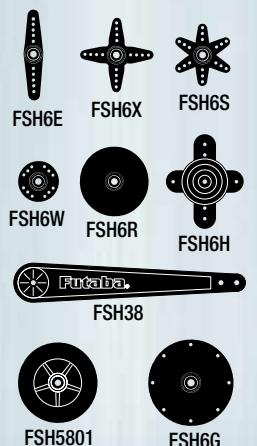
## HARDWARE

Servo	Case Set	Stock#	Gear Set	Stock#	Hardware	Stock#
S36G/136G	FCS-36G	FUTM2990	FGS-36G	FUTM3997	FSH-51	FUTM2280
S48/148	UBS-48	FUTM2999	FGS-48	FUTM3400	FSH-41	FUTM2260
S3001	UBS-3001	FUTM2946	FGS-48	FUTM3400	FSH-41	FUTM2260
S3002	FCS-3002	FUTM2935	FGS-3002	FUTM3415	FSH-49	FUTM2273
S3003	UBS-3003	FUTM2939	FGS-3003	FUTM3416	FSH-41	FUTM2260
S3004	UBS-3004	FUTM2942	FGS-3003	FUTM3416	FSH-41	FUTM2260
S3010	FCS-3010	FUTM2948	FGS-3010	FUTM3328	FSH-41	FUTM2260
S3101	FCS-3101	FUTM3050	FGS-3101	FUTM3404	FSH-44	FUTM2270
S3102	FCS-3101	FUTM3050	FGS-3102	FUTM3435	FSH-49	FUTM2273
S3103/06	FSC-3103	FUTM3070	FGS-3103	FUTM3438	FSH-55	FUTM2275
S3104	FCS-34	FUTM2975	FGS-3104	FUTM3352	FSH-41	FUTM2260
S3107	TBA	TBA	FGS-3107	FUTM3358	FSH-55	FUTM2275
S3302	FCS-34	FUTM2975	FGS-3302	FUTM3410	FSH-49	FUTM2273
S3303	FCS-34	FUTM2975	FGS-3303	FUTM3411	FSH-49	FUTM2273
S3305	FCS-3010	FUTM2948	FGS-3305	FUTM3384	FSH-57	FUTM2295
S3401	FCS-3401	FUTM3060	FGS-3401	FUTM3401	FSH-41	FUTM2260
S3801	FCS-34	FUTM2975	FGS-3303	FUTM3411	FSH-49	FUTM2273
S3802	FCS-3802	FUTM2976	FGS-3802	FUTM3398	FSH-49	FUTM2274
S5050	FCS-34	FUTM2975	FGS-5050	FUTM3449	FSH-57	FUTM2295
S5101	FCS-30	FUTM2930	FGS-9101	FUTM3405	FSH-41	FUTM2260
S5102	FCS-33	FUTM2970	FGS-5102	FUTM3402	FSH-49	FUTM2273
S5301	FCS-34	FUTM2975	FGS-5401	FUTM3446	FSH-49	FUTM2273
S5302	FCS-34	FUTM2975	FGS-5302	FUTM3449	FSH-49	FUTM2273
S5801	FCS-5801	FUTM3010	FGS-5801	FUTM3406	FSH-49	FUTM2273
S9001	FCS-9001	FUTM3055	FGS-48	FUTM3400	FSH-41	FUTM2260
S9101	FCS-30	FUTM2930	FGS-9101	FUTM3405	FSH-41	FUTM2260
S9102	FCS-9102	FUTM3000	FGS-9102	FUTM3407	FSH-51	FUTM2280
S9150	FCS-9150	FUTM3166	FGS-9150	FUTM3441	FSH-53	FUTM2290
S9151	FCS-9151	FUTM3057	FGS-9151	FUTM3442	FSH-41	FUTM2260
S9206	FCS-9203	FUTM3067	FGS-9206	FUTM3447	FSH-49	FUTM2273
S9250	FCS-9203	FUTM3067	FGS-9203	FUTM3433	FSH-49	FUTM2273
S9251	FCS-9251	FUTM3068	FGS-9251	FUTM3443	FSH-49	FUTM2273
S9252	FCS-9151	FUTM3057	FGS-9252	FUTM3444	FSH-41	FUTM2260
S9253	FCS-9151	FUTM3057	FGS-9253	FUTM3445	FSH-41	FUTM2260
S9350	FCS-9350	FUTM3050	FGS-9350	FUTM3434	FSH-57	FUTM2295
S9351	TBA	TBA	TBA	TBA	FSH-49	FUTM2273
S9402	FCS-9203	FUTM3067	FGS-9402	FUTM3430	FSH-49	FUTM2273
S9405	FCS-9203	FUTM3067	FGS-9402	FUTM3430	FSH-49	FUTM2273
S9451	FGS-9451	FUTM3069	FGS-9451	FUTM3432	FSH-57	FUTM2295
S9550	FCS-9550	FUTM3015	FGS-9550	FUTM3439	FSH-57	FUTM2295
S9602	FCS-9602	FUTM3065	FGS-9602	FUTM3437	FSH-49	FUTM2273
S9650	FCS-9650	FUTM3431	FGS-9650	FUTM3080	FSH-41	FUTM2260

TBA = To Be Announced

## SERVO HORNS

Stock #	Part #	Style/Application
FUTM1835	FSH6H	Horn H S3801
FUTM1980	FSH6E	Horn E - Long Arm S28/48
FUTM2000	FSH6R	Horn C - Disc S28/48
FUTM2010	FSH6S	Horn B - Star S28/48
FUTM2020	FSH6W	Horn D - Wheel S28/48
FUTM2030	FSH6X	Horn A - X S28/48
FUTM2035	FSH6G	Horn G - Disc S34/134/134G
FUTM2045	FSH5801	Horn – Sail Winch Drum S5801
FUTM2258	FSH38	Sail Servo Arm - S3801/S125

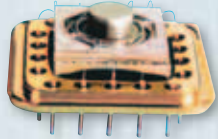


# GY GYROS



## For better-than-piezo gyro performance!

Unlike standard piezo gyros with only a few sensor nodes, GY Gyros feature a cluster of 18 sensor nodes. It's a big difference in sensor numbers that accounts for GY's amazing improvements in sensitivity and accuracy.



While leaders in other industries were starting to explore the potential of Silicon Micro Machining (SMM), Futaba had already created the first practical application: GY Series Gyros for radio control. SMM allows mechanical and electronic components to be mounted onto a machined, high-density chip that's smaller than a pencil point. The result is a resonator that is shock- and vibration-resistant, far more sensitive and accurate than standard piezo gyros and directly responsible for GY gyros' dramatically superior and exceptionally reliable performance.

- Avoids the temperature sensitivity of piezo crystals — GY Gyros function well within a wide 14°F to 122°F range!
- Reduces start-up time to a virtually instantaneous 3 seconds
- Requires just 80mA of operating current



## Only SMM technology could create GY Gyros' incredibly compact, lightweight Active Angular Velocity Control System

- Sends control signals to the gyro servo continuously, even when the tail is not moving
- Trims the rudder against side winds automatically, virtually eliminating the need for rudder trim changes during flight
- Provides the most positive control for hovering and flying in crosswinds

## Heli Gyros

### GY601 with S9251 Digital Servo



FUTM0820

- Competition gyro ideal for F3C pattern fliers
- Ultra high-speed 330Hz operation
- Gain can be adjusted from transmitter
- LCD screen allows precise setting

Dimensions:  
Sensor: 1.3 x 1.3 x 0.71 in (34x34x18mm)  
Control Amp: 2.2 x 1.3 x 0.59 in (57x34x15mm)  
Weight: 2.1 oz (59g)  
Sensor: 0.88 oz (25g)  
Control Amp: 1.2 oz (34g)

S9251 Servo Specifications (for use only with the GY601 gyro):  
Speed: 0.07 sec. @ 60°  
Torque: 38.9 oz-in

### GY240



FUTM0809

- Ideal for electrics and .30-size models
- Single-gain adjustable trim

Dimensions: 1 x 1 x 0.8 in (27x27x20mm)  
Weight: 0.88 oz (25g)

### GY401



FUTM0807

Dimensions: 1 x 1 x 0.8 in (27x27x20mm)  
Weight: 0.95 oz (27g)

- Also available with high-speed S9253 digital servo (FUTM0804)
- Ideal for .30-.60 size models
- Gain can be adjusted from transmitter
- Servo travel limit trimmer protects servo linkage

### GY502



FUTM0813

- Also available with high-speed S9253 digital servo (FUTM0814)
- Ideal for .60-size helicopters
- High-speed 270Hz operation — four times faster than conventional gyros
- LCD screen allows precise setting

Dimensions:  
Sensor: 1.3 x 1.3 x 0.71 in (34x34x18mm)  
Control Amp: 2.2 x 1.3 x 0.59 in (57x34x15mm)  
Weight: 2.1 oz (59g)  
Sensor: 0.88 oz (25g)  
Control Amp: 1.2 oz (34g)

## Airplane Gyros

### GYA-350



FUTM0816

Dimensions: 1.0 x 1.0 x 0.75 in (25x25x19mm)  
Weight: 1.0 oz (26g)

- Single servo, single axis gyro for fixed-wing aircraft
- Keeps rudder, nose wheel or tail wheel aligned perfectly with the airplane at all times to reduce wear on landing gear

### GYA-351



FUTM0817

Dimensions: 1.0 x 1.0 x 0.75 in (25x25x19mm)  
Weight: 1.3 oz (32g)

- Designed for dual aileron applications, such as flaperons
- "Dampens" oscillations and helps the airplane maintain a constant heading

### GYA-352 Dual Axis



FUTM9818

## An innovative DUAL AXIS gyro for airplanes!

- For simultaneous control of aileron/rudder, elevator/rudder, or aileron/elevator operation
- Also offers elevon mixing circuitry for delta wings and V-tails
- Modelers can adjust gyro axis gain and switch from AVCS to normal mode through the transmitter

Dimensions:  
1.7 x 1.7 x 1.2 in (43x30x30mm)  
Weight: 1.8 oz (58g)

# FLIGHT PACKS

## Fly every model in your hangar with just one radio!

Less work than moving equipment from model to model, more affordable than assembling sets piece by piece, Futaba Flight Packs bring together the essentials of on-board gear in a single, convenient package.

All Flight Packs require a receiver crystal.

NOTE: Low Band version can be used only with crystals for Channels 11-35.  
High Band version can be used only with crystals for Channels 36-60.



## Flight Pack Contents

### For Airplanes with standard servos

- R127DF Receiver
- 4(S3003) Servos
- Switch Harness
- Aileron Extension
- Servo Accessories
- 600mAh Rx NiCd (NR4J)

Low Band FUTL0511  
High Band FUTL0536

### For Airplanes with ball bearing servos

- R127DF Receiver
- 4(S3004) Servos
- Switch Harness
- Aileron Extension
- Servo Accessories

Low Band FUTL0111  
High Band FUTL0136  
Note: Rx NiCd required

### For Airplanes with ball bearing servos

- R127DF Receiver
- 4(S3004) Servos
- Switch Harness
- Aileron Extension
- Servo Accessories
- 600mAh Rx NiCd (NR4J)

Low Band FUTL0311  
High Band FUTL0336

### For Helicopters with ball bearing servos

- R127DF Receiver
- 5(S3001) Servos
- Switch Harness
- Servo Accessories
- 1000mAh NiCd (NR4RB)

Low Band FUTL0411  
High Band FUTL0436

## RADIO FREQUENCY ORDERING INFORMATION

AIRPLANES (72MHz)				CARS & BOATS (75 MHz)						6 METER FREQUENCIES (50 MHz)		AIRCRAFT OR SURFACE (27 MHz)			
Low Band		High Band		Frequency	Ch.	Frequency	Ch.	Frequency	Ch.	Frequency	Ch.	Frequency	Ch.	Color	
72.010	11	72.270	24	72.510	36	72.770	49	75.410	61	75.610	71	75.810	81	26.995	A1 Brown
72.030	12	72.290	25	72.530	37	72.790	50	75.430	62	75.630	72	75.830	82	50.800	00
72.050	13	72.310	26	72.550	38	72.810	51	75.450	63	75.650	73	75.850	83	50.820	01
72.070	14	72.330	27	72.570	39	72.830	52	75.470	64	75.670	74	75.870	84	50.840	02
72.090	15	72.350	28	72.590	40	72.850	53	75.490	65	75.690	75	75.890	85	50.860	03
72.110	16	72.370	29	72.610	41	72.870	54	75.510	66	75.710	76	75.910	86	50.880	04
72.130	17	72.390	30	72.630	42	72.890	55	75.530	67	75.730	77	75.930	87	50.900	05
72.150	18	72.410	31	72.650	43	72.910	56	75.550	68	75.750	78	75.950	88	50.920	06
72.170	19	72.430	32	72.670	44	72.930	57	75.570	69	75.770	79	75.970	89	50.940	07
72.190	20	72.450	33	72.690	45	72.950	58	75.590	70	75.790	80	75.990	90	50.960	08
72.210	21	72.470	34	72.710	46	72.970	59							50.980	09
72.230	22	72.490	35	72.730	47	72.990	60								
72.250	23			72.750	48										

To order a system on a specific frequency, combine the system's 6-character stock number with the desired channel number.  
Ex: FUTK5532 = a 6EXA radio on channel 32.

6 Meter frequencies require an FCC amateur radio license for operation.

# RECEIVERS, MODULES & CRYSTALS



**R122JE – 2-Channel AM w/BEC**

Band	Stock #	Xtal St #
27MHz	FUTL0100	FUTL46**
50MHz	n/a	
72MHz Low	FUTL0102	FUTL47**
72 MHz High	FUTL0103	FUTL48**
75MHz	FUTL0104	FUTL49**
Dimensions	Weight	Ant
1.9 x 1.3 x 0.7 in	0.66 oz	39 in



**R142JE – 2-Channel AM w/BEC**

Band	Stock #	Xtal St #
27MHz	FUTL0200	FUTL46**
50MHz	n/a	
72MHz Low	n/a	
72 MHz High	n/a	
75MHz	FUTL0204	FUTL49**
Dimensions	Weight	Ant
1.7 x 1.1 x 0.7 in	0.56 oz	19.2 in



**R133F – 3-Channel FM Micro**

Band	Stock #	Xtal St #
27MHz	FUTL0305	FUTL61**
50MHz	n/a	
72MHz Low	n/a	
72 MHz High	n/a	
75MHz	FUTL0309	FUTL64**
Dimensions	Weight	Ant
1.5 x 1.0 x 0.6 in	0.5 oz	19.6 in



**R203HF – 3-Channel FM w/Response**

Band	Stock #	Xtal St #
27MHz	FUTL0340	FUTL61**
50MHz	n/a	
72MHz Low	n/a	
72 MHz High	n/a	
75MHz	FUTL0344	FUTL64**
Dimensions	Weight	Ant
1.5 x 1.0 x 0.6 in	0.63 oz	19.4 in



**R1131P – 3-Channel PCM Micro**

Band	Stock #	Xtal St #
27MHz	FUTL0300	FUTL51**
50MHz	n/a	
72MHz Low	n/a	
72 MHz High	n/a	
75MHz	FUTL0304	FUTL52**
Dimensions	Weight	Ant
1.7 x 1.1 x 0.4 in	0.7 oz	19.6 in



**R114H – 4-Channel AM**

Band	Stock #	Xtal St #
27MHz	FUTL0400	FUTL46**
50MHz	n/a	
72MHz Low	FUTL0404	FUTL47**
72 MHz High	FUTL0407	FUTL48**
75MHz	FUTL0408	FUTL49**
Dimensions	Weight	Ant
1.9 x 1.3 x 0.8 in	0.93 oz	39 in



**R114F – 4-Channel FM Micro**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	n/a	
72MHz Low	FUTL0442	FUTL62**
72 MHz High	FUTL0443	FUTL63**
75MHz	n/a	
Dimensions	Weight	Ant
1.3 x 0.8 x 0.5 in	0.36 oz	27.4 in



**R127DF – 7-Channel FM**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	FUTL0701	FUTL56**
72MHz Low	FUTL0702	FUTL57**
72 MHz High	FUTL0703	FUTL58**
75MHz	FUTL0704	FUTL59**
Dimensions	Weight	Ant
2.6 x 1.4 x 0.8 in	1.4 oz	39.4 in



**R138DP – 8-Channel PCM**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	n/a	
72MHz Low	FUTL0802	FUTL57**
72 MHz High	FUTL0803	FUTL58**
75MHz	FUTL0804	FUTL59**
Dimensions	Weight	Ant
2.6 x 1.4 x 0.8 in	1.4 oz	39.4 in



**R148DF – 8-Channel FM Micro**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	FUTL0811	FUTL56**
72MHz Low	FUTL0812	FUTL57**
72 MHz High	FUTL0813	FUTL58**
75MHz	n/a	
Dimensions	Weight	Ant
2.2 x 1.0 x 0.9 in	1.1 oz	38.8 in



**R148DP – 8-Channel PCM Micro**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	FUTL0821	FUTL56**
72MHz Low	FUTL0822	FUTL57**
72 MHz High	FUTL0823	FUTL58**
75MHz	n/a	
Dimensions	Weight	Ant
2.2 x 1.0 x 0.9 in	1.1 oz	38.8 in



**R149DP – 9-Channel PCM**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	FUTL0901	FUTL56**
72MHz Low	FUTL0902	FUTL57**
72 MHz High	FUTL0903	FUTL58**
75MHz	n/a	
Dimensions	Weight	Ant
2.2 x 1.3 x 0.8 in	1.2 oz	38.8 in



**R309DPS – (Synthesized) PCM**

Band	Stock #	Xtal St #
27MHz	n/a	
50MHz	n/a	
72MHz Low	FUTL7600	n/a
72 MHz High	n/a	
75MHz	n/a	
Dimensions	Weight	Ant
2.6 x 1.5 x 1.0 in	2.0 oz	43.4 in

Note: "DF" or "DP" indicate dual-conversion receivers. Receivers and crystals are sold separately.

Note: Low = Ch 11-35 High = Ch 36-60

For discontinued radio systems, visit [www.futaba-rc.com](http://www.futaba-rc.com)

## Transmitter Modules

Synthesized modules can transmit on any free channel. All other transmitter modules include a channel-specific crystal.



System	Band	Stock #	Description
3PJS	27, 75MHz	FUTL18**	TJ27/75 FM
3PK	27, 75MHz	FUTL13**	RFPK27 FM
3PK	27, 75MHz	FUTL14**	3PK AM
3PK	75MHz	FUTL8905	3PK FM Synthesized
9C	50, 72MHz	FUTL15**	TP50&72 FM
9C	72MHz	FUTL8910	9C FM Synthesized
9Z	50, 72MHz	FUTL17**	TK50&72 FM
9Z	72 MHz	FUTL8900	9Z FM Synthesized

The stock number for a specific channel is the 6-character stock number plus the channel number. Ex: FUTL90A1 = 27 MHz set on channel A1.

## Crystals



Crystal Sets include both a standard-size transmitter crystal and a receiver crystal.

CRYSTAL SETS	
FUTL20**	Dual Conversion FM Set
FUTL90**	FM Set 27 MHz Only
FUTL91**	FM Set 50, 72 & 75 MHz
FUTL92**	AM Set 72 & 75 MHz
FUTL93**	AM Set 27MHz
FUTL95**	FM Short Set 27MHz
FUTL96**	FM Short Set 72MHz
FUTL97**	FM Short Set 75MHz

Note: Low = Ch 11-35 High = Ch 36-60

Dual-conversion (DC) crystals are compatible with all Futaba dual-conversion receivers.

Receiver Crystals include either one short or one standard size crystal

RECEIVER CRYSTALS	
FUTL46**	AM 27 MHz
FUTL47**	AM 72 MHz Low
FUTL48**	AM 72 MHz High
FUTL49**	AM 75 MHz
FUTL51**	FM 27 MHz
FUTL52**	FM 75 MHz
FUTL56**	FM DC 50 MHz
FUTL57**	FM DC 72 MHz Low
FUTL58**	FM DC 72 MHz High
FUTL59**	FM DC 75 MHz
FUTL61**	FM 27 MHz Short
FUTL62**	FM 72 MHz Low Short
FUTL63**	FM 72 MHz High Short
FUTL64**	FM 75 MHz Short

## FS-1 Fail Safe Unit

Protect nitro-powered cars, trucks and boats from damage or loss with an FS-1. It constantly monitors operation and reacts instantly to signal loss or interruption by dropping the throttle to a pre-set value. Resets automatically when the signal is reacquired. Requires simple, plug-in installation and works with all Futaba AM and FM radios. Requires 4.8V or 6.0V power and draws only 4mA.

Dimensions: 0.81 x 1.4 x 0.33 in (20x35x10mm)  
Weight: 0.23 oz (7g)



FUTM0990

## MSA-10 Servo Synchronizer

With the MSA-10, you can synchronize the operation of up to 4 servos and control them all from a single channel. Separate end point and travel adjustments for each servo ease set-up and improve precision. Reversing allows you to mount servos for maximum ease and efficiency. The MSA-10 can be powered by the receiver battery, or by a separate pack.

Dimensions: 0.8 x 1.5 x 0.6 in (21x39x15mm)  
Weight: 0.46 oz (13g)



FUTM4155

## SR10 Dual Servo Reverser

Ideal for two-servo control surfaces or twin-engine throttles, the SR10 controls two servos from a single channel without the need for special motors or transmitter mixing. Easy to install and equally useful in cars, boats and large-scale aircraft, it features adjustable neutral trim and an RF noise filter for signal clarity.

Dimensions: 0.9 x 1.5 x 0.4 in (23x38x10mm)  
Weight: 0.9 oz (25g)



FUTM4150

## Electronic Speed Controls

With Futaba Electronic Speed Controls (ESCs), enjoying smooth, proportional control of acceleration is as easy as the push-button set-up that precedes it. Heat sinks, powerful FETs and high-frequency switching provide cool, efficient operation. Both reversible ESCs include a lock-out that allows drivers to move from sport driving to club racing with a touch, while the MC800C Pro provides serious competitors with the features that help win races. All include screwdriver, capacitor, Schottky diode, double-sided tape, power switch and Futaba J connector.



FUTM0922



FUTM0939

- Forward/Reverse/Brake
- 1.5kHz Switching Rate
- 5.0V BEC
- Reverse Lock-Out for sport driving and ROAR-legal racing
- Auto Cut-Off cuts motor power when voltage drops
- Protected against short circuits, current and heat overload
- Signals that receiver is not turned off with sound alarm and vehicle "pulsing"
- Futaba J receiver, Bullet motor and JST battery connectors installed

## PA-2 Pilot Assist Link

- Automatically returns planes to level flight

Once the PA-2 is installed, gusty winds and pilot error can't knock planes off course and out of control. Its sensors detect deviations from level flight, and automatically use elevator and aileron to restore the plane to true horizontal. Sensitivity adjusts from 0-100%. Draws just 5 mA w/4.8V power. PA-2 includes amplifier and sensor.

FUTM0999 PA-2 Pilot Assist Link  
FUTL0995 PAR-2 Pilot Assist Link w/RX 72L  
FUTL0996 PAR-2 Pilot Assist Link w/RX 72H



FUTM0999

Amp Dimensions:  
2.1 x 1.3 x 0.6 in (54x34x15mm)  
Weight: 0.9 oz (25g)

Sensor Diameter: 1.3 in (33mm);  
Weight: 0.5 oz (15g)

## GV-1 Governor

- More precise, consistent control — automatically!

The GV-1 turns on and off from the throttle stick and holds rpm to within +/- 1% of the value you set. Works in a 1,000-2,100 rpm range. Includes control amp, sensor, mounting brackets for .30 and .60 models, magnets and a small screwdriver. Requires 3.8-6.0V power and draws 40mA @ 4.8V. Sensor Magnet Bracket includes all GV-1 parts except control amp.

Sensor: 0.3 x 0.4 x 0.6 in (7.6x10x15mm)  
Control Amp: 2.2 x 1.2 x 0.6 in (56x30x15mm)  
Weight: 1.34 oz (38g)

FUTM1101 GV101 Sensor Magnet Bracket  
FUTQ1000 FSH58 Gyro Mounting Pads 30mm (3)



FUTM1001

## MC800C Pro

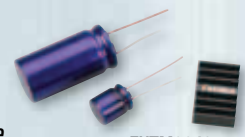


FUTM0939

- Forward/Brake
- 3.1kHz Switching Rate
- 5.7V BEC
- Power Control offers digital mastery of traction and acceleration
- Power Start provides instant, full-power starts
- Neutral Brake "taps" brakes when throttle is released
- Hyper Brake adjusts minimum/maximum brake action to driving style
- External solder points for motor and battery leads

## Worlds Kit

- High-end enhancement for the MC800C Pro
- Includes high-power large and small capacitors, redesigned heat sink head, heat shrink tubing and decal sheet.



FUTM0940

Stock #	Model #	Dimensions	Weight	Capacity	Motor Limit	Current (fwd/rev)	Wire
FUTM0922	MC230CR	1.07 x 1.31 x 0.50 in (28x33x13mm)	1.55 oz (44g)	6-7 cells	20+ turns	90A/45A	16 ga.
FUTM0932	MC330CR	1.07 x 1.31 x 0.50 in (28x33x13mm)	1.59 oz (45g)	6-7 cells	15+ turns	200A/100A	14 ga.
FUTM0939	MC800C Pro	1.1 x 1.0 x 0.57 in (28x25x14mm)	0.62 oz (18g)	4-7 cells	5+ turns	235A/n/a	12 ga.



## Extensions & Charge Cords

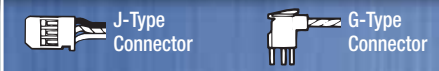


FUTM4149

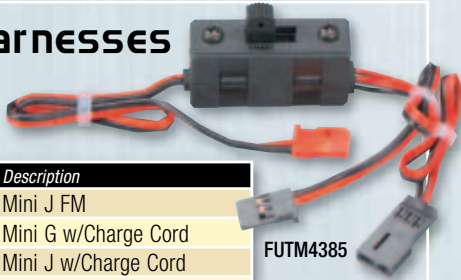


FUTM3900

Stock #	Part #	Description	Length
FUTM3900	AEC1	G-Type Servo Extension	9 in
FUTM3910	AEC3	J-Type Servo Extension	9 in
FUTM3955	AEC11	J-Type Servo Extension	16 in
FUTM4110	AEC9	Servo Adapter J Sx to G Rx	6 in
FUTM4120	AEC10	Servo Adapter G Sx to J Rx	6 in
FUTM4125	AEC12	J-Type Servo Extension	39 in
FUTM4130	AEC13	J-Type Dual Servo Extension	6 in
FUTM4135	AEC16	J-Type Heavy Duty Servo Extension	6 in
FUTM4140	AEC14	J-Type Heavy Duty Servo Extension	8 in
FUTM4145	AEC15	J-Type Heavy Duty Servo Extension	16 in
FUTM4147	AEC17	J-Type Heavy Duty Servo Extension	22 in
FUTM4148	AEC18	J-Type Heavy Duty Servo Extension	40 in
FUTM4149	AEC19	J-Type Servo Extension w/filter	8 in
FUTM4221	NCC13	Transmitter Charge Cord	60 in
FUTM4231	NCC14	Receiver Charge Cord	60 in



## Switch Harnesses



FUTM4385

Stock #	Part #	Description
FUTM4350	SWH7	Mini J FM
FUTM4360	SWH8	Mini G w/Charge Cord
FUTM4370	SWH13	Mini J w/Charge Cord
FUTM4380	SWH10	Mini G w/BEC Connector
FUTM4382	SWH12	Mini J w/BEC Connector
FUTM4385	SWH14	Heavy-Duty J w/Charge Cord

## DSC Cords



FUTM4245

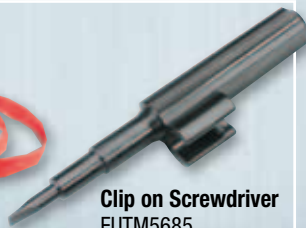
With a Direct Servo Control (DSC) cord, you can test servo response without sending a signal — great for last-minute adjustments in the pits.

Stock #	Part #	Description
FUTM4243	NCC9	DSC Cord w/Charge Adapter 9V/9Z
FUTM4244	NCC12	DSC Cord 9C
FUTM4245	NCC10	DSC Cord 3PB/3PK
FUTM4250	DCC11	DSC Cord 3UC/9Z

## Miscellaneous



Neck Strap FUTM5692



Clip on Screwdriver  
FUTM5685

## Radio Cases & Bags



- Brushed-aluminum exterior w/foam-padded interior.
- Lockable latches. 2 keys



Double Transmitter Case (FUTM5705)  
Measures: 12.8 x 7.9 x 10.3 in  
(450x200x260mm)

Single Transmitter Case (FUTM5701)  
Measures: 16.5 x 12.3 x 6.6 in  
(420x310x170mm)



Plastic Transmitter Case  
(FUTM5710)  
Measures: 10 x 7.8 x 4.8 in  
(255x200x120mm)



3PK Transmitter Bag (FUTP1000)  
Created for the 3PK, but movable foam blocks allow use with any 2- or 3-channel pistol. Black nylon construction w/rigid sides, carrying handle and adjustable shoulder strap. Measures: 15 x 8.8 x 6 in (380x220x150mm)

Aircraft System Transmitter Bag (FUTP1005)

Dual zippers open the top of this soft-side, black nylon bag to receive most stick radios. Features carry strap on top, plus side pouch. Measures: 8.4 x 4.5 x 10 in (210x115x255mm)



## Antennas

ANT5	ANT12
ANT6	ANT13
ANT8	ANT14
ANT11	ANT15
	1M14306501
	1M14E05401

Transmitter Antennas		
ANT5	FUTM5040	4VF/YF/NBL, 6YG/X/EXA
ANT6	FUTM5050	4L, 5LK, 6NPK/NFK/VH
ANT8	FUTM5070	G SERIES PCM
ANT11	FUTM5100	3PG LONG ALL FREQ
ANT12	FUTM5110	9C/V/Z, 8SS/U
ANT13	FUTM5111	2CR/DR/FR/PC/PCKA/PEKA/PH, 3FR
ANT14	FUTM5112	3PJ
ANT15	FUTM5113	3PDFX
1M14306501	FUTM5115	3PK
1M14E05401	FUTM5116	2PL

Receiver Antennas	
FUTM1610	AL0142 AM 39.4" (1000mm)
FUTM1620	AL0146 FM 43.3" (1100mm)

# NiCds

## Quality Futaba Systems - Genuine Sanyo® NiCds!



Sanyo® NiCd battery packs are standard equipment in more and more Futaba radio systems and the standard in R/C radio power

everywhere. Cells are welded to ensure strong connections before being shrinkwrapped and equipped with lead and connector. Ready for instant use — and long life — Sanyo NiCds.

### Receiver NiCds

Most packs include a Futaba J connector. Exceptions noted.

-  **NR4K** (FUTM1210)  
4.8V/250mAh  
1.3 x 2.3 x 0.58 in (32x58x15mm)  
2.0 oz (57g)
-  **NR4M** (FUTM1290)  
4.8V/500mAh w/G connector  
2.0 x 2.3 x 0.6 in (51x58x15mm)  
3.4 oz (95g)
-  **NR5F600** (FUTM1381)  
6.0V/600mAh  
1.3 x 3.4 x 0.7 in (32x85x18mm)  
3.5 oz (100g)
-  **NR4J** (FUTM1280)  
4.8V/600mAh  
2.0 x 2.3 x 0.6 in (51x58x15mm)  
3.4 oz (95g)
-  **NR4QB** (FUTM1295)  
4.8V/600mAh  
1.1 x 2.0 x 1.1 in (28x51x28mm)  
3.4 oz (95g)
-  **NR5T600** (FUTM1383)  
6.0V/600mAh  
1.2 x 2.0 x 1.3 in (31x51x32mm)  
3.5 oz (100g)
-  **NR4F1500** (FUTM1285)  
4.8V/1500mAh  
1.9 x 2.8 x 0.74 in (47x69x19mm)  
4.1 oz (116g)
-  **NR4RB** (FUTM1380)  
4.8V/1000mAh  
1.9 x 2.8 x 0.74 in (47x69x19mm)  
4 oz (112g)
-  **NR5RB** (FUTM1385)  
6.0V/1000mAh  
1.9 x 2.1 x 1.3 in (47x52x33mm)  
5.0 oz (141g)

### Transmitter NiCds

-  **NT8A** (FUTM1415)  
9.6V/700mAh  
w/5-pin connector  
4.8 x 1.4 x 1.4 in (119x34x36mm)
-  **NT8CG** (FUTM1420)  
9.6V/500mAh  
w/G connector  
4.6 x 1.3 x 1.3 in (115x32x32mm)
-  **NT8H** (FUTM1430)  
9.6V/500mAh  
w/2-Pin connector  
5.9 x 0.6 x 1.7 in (148x15x43mm)
-  **NT8F1000** (FUTM1435)  
9.6V/1000mAh  
w/2-pin connector  
4.5 x 0.56 x 2.1 in (112x14x52mm)
-  **NT8F600B** (FUTM1440)  
9.6V/600mAh  
w/ J connector  
4.5 x 0.56 x 2.0 in (112x14x51)
-  **NT8LP** (FUTM1450)  
9.6V/500mAh  
w/9V connector  
4.4 x 1.2 x 1.2 in (111x30x31mm)
-  **NT8S600B** (FUTM1457)  
9.6V/600mAh  
w/J connector  
4.1 x 1.3 x 1.2 in (103x32x30mm)
-  **NT8S700B** (FUTM1460)  
9.6V/700mAh  
w/J connector  
4.1 x 1.3 x 1.2 in (103x32x30mm)
-  **NT8F700B** (FUTM1462)  
9.6V/700mAh  
w/J connector  
4.5 x 0.56 x 2.0 in (113x14x51)
-  **NT8JY2** (FUTM1463)  
9.6V/600mAh  
w/2-pin connector  
4.5 x 0.6 x 2.0 in (112x15x51mm)
-  **NT8IB** (FUTM1465)  
9.6V/600mAh  
w/J connector  
4 x 1.1 x 1.2 in (100x28x29mm)
-  **NT8S1100** (FUTM1470)  
9.6V/1100mAh  
w/5-pin connector  
4.8 x 1.4 x 1.4 in (119x34x36mm)

### Dual-Output Chargers

• The easy, "set & forget" way to charge a single pack or a Tx and Rx pack together overnight.



Stock #	Model #	Application	4.8V rate	9.6V rate
FUTM1800	FBC8B4	All systems w/600mAh Rx & Tx NiCd Packs	50mA	50mA
FUTM1830	FBC19B4	All 9Z systems w/1000mAh Rx & 700mAh Tx NiCd packs	100mA	70mA
FUTM1825	FBC29A4	All 9Z WC2 systems w/1500mAh Rx & 1100mAh Tx NiCd packs	150mA	100mA
FUTM1820	FBC6B4	All 9C systems	100mA	50mA

# Apparel

## Official Futaba Hat

Lightweight, 100% cotton cap offers good looks, eye protection and easy washing.

Plastic strap adjusts to fit virtually any head. Off-white, with dark green Futaba logo, bill & air holes. (FUTZ7087)



A



B

## Futaba Shirts

Made from 100% cotton, Futaba polos and tees provide cool, comfortable wear and a choice of looks. Classic, short-sleeve **Polo (A)** features an off-white body and dark green trim, with the Futaba name printed on both sides of the shirt. **T-Shirt (B)** is off-white with dark green trim and has Futaba's bold maroon/green racing logo across the chest.

### Futaba Polo Shirts

FUTZ7076	Medium
FUTZ7077	Large
FUTZ7078	FX-Large
FUTZ7079	XX-Large

### Futaba T Shirts

FUTZ7083	Medium
FUTZ7084	Large
FUTZ7085	X-Large
FUTZ7086	XX-Large

# Promotional Items

## MonoKote® Trim Sheet Decals

These self-adhesive Futaba logos offer the ease of cut, place and press application and the rich, lasting colors of Top Flite® MonoKote! Car versions offer 7 sizes on a 17-3/4" x 5" (450x125mm) sheet. Air versions provide 10 sizes on a 36" x 5" (910x125mm) sheet.



MonoKote Trim Sheet — Small (FUTZ3500)



4-Color — (FUTZ3503)



MonoKote Trim Sheet — Large (FUTZ3501)



3-Color — Large (FUTZ3504)

## Banner

Heavy-duty Tyvek sign w/brass-reinforced holes for hanging.



Tyvek Banner 4'x1' (FUTZ3510)



## Trainer Box

It's an inexpensive, hands-on learning tool for individuals and a great investment in future members for flying clubs. Linked to the instructor's radio with a trainer cord (sold separately), the Trainer Box allows the student to practice with confidence and allows the instructor to assume control instantly if the need arises. Compatible with all current Futaba aircraft systems.

FUTM4375

## Trainer Cords

The learning link between student and instructor! Available in 3 connector combinations that can make any two current Futaba aircraft systems a teaching-learning pair.



**MMTC Cord (FUTM4415)**  
Square Micro/Square Micro  
For: Futaba 9C, 6EXA, 4YF & Tower Hobbies® 4-TH



**M-T-FM Cord (FUTM4410)**  
Round/Round  
For: most earlier Futaba radios



**MDTC Cord (FUTM4420)**  
Round/Square Micro  
For: Connecting 9C, 4YF, 6EXA or 4-TH radios to "round plug" systems

## Dry Cell Cases



**S30050 (FUTM1560)**  
UM3 Tx Battery Case 8-Cell Dry  
For: 2P/KA, 3PB



**S30055 (FUTM1565)**  
Tx Battery Case 7-Cell  
For: 2PD/F, 3PB, 5UAF/P, 6NHR, 7UAF/P/FS/PS



**10730 (FUTM1580)**  
Slant Tx Battery Case  
For: 2PB/KA



**FBB1 (FUTM1590)**  
Dry 4-Cell Rx Case  
BEC Connector  
For: 2ER/FR/PH/PHKA, 3FR



**FBB2 (FUTM1595)**  
Dry 4-Cell Rx Case  
J Connector  
For: 3PK

# Futaba®

## More modelers insist on Futaba.

Nearly everyone you meet at the track, pond or flying field owns a Futaba radio. The reason? Simple. No matter what your priorities are — price, ease of use, access to innovative programming functions for highly customized control — a Futaba system is available to bring out the best in you and your model.



## Specialists in fast, friendly service.

In the unlikely event that your Futaba equipment ever requires service, you can count on Futaba's exceptional Service Center to get you back into action fast.

Staffed by expert technicians and equipped with the most advanced diagnostic tools, the Service Center gives your Futaba radio system the knowledgeable care that it deserves. If a repair is needed, they get it right the first time.

And the Service Center's location in the central United States means that shipping to most areas of the country takes only two days. You get your return package fast — without paying high overnight shipping charges.

**Futaba Service Center USA**  
3002 N. Apollo Dr. Suite 1, Champaign, IL 61822



## Visit Futaba online.



*Looking for details about Futaba's selection of radios, servos, parts and accessories? It's all as close as your computer.*

**www.futaba-rc.com**

### One Year Limited Warranty

Futaba digital proportional R/C systems are warranted to the original purchaser for one full year from the date of purchase against defects in material and workmanship. During this period Futaba will repair or replace, at our discretion, the defective component.

This warranty does not apply to improperly installed, handled, or abused systems, radios which have been damaged in crash, nor to any unit which has been repaired or altered by unauthorized agencies. Under no circumstances will the buyer be entitled to consequential or incidental damages. This limited warranty gives you specific legal rights; you may have other rights which vary from state to state. Batteries and plastic housings are not covered by warranty.

This warranty applies to Futaba products purchased and used in the United States, Canada, and Mexico.