Futaba

RADIO CONTROL SYSTEMS, SERVOS AND ACCESSORIES















INNOVATIONS IN TECHNOLOGY FOR SUPERIOR CONTROL

9Z WC2 9-CHANNEL COMPUTER SYSTEMS











| 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 ultilize 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



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



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 I6K CAMPac















| -0 |
|--|
| 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 700mA |
| FUTJ76** | 9CHF | FM | 50,72 | TP-FM | _ | R148DF | NR4RB 1000mAh | NT8S700B 700mA |
| FUTJ77** | 9CAP | PCM | 50,72 | TP-FM | _ | R149DP | NR4J 600mAh | NT8S700B 700mA |
| FUTJ78** | 9CHP | PCM | 50,72 | TP-FM | _ | R149DP | NR4RB 1000mAh | NT8S700B 700mA |
| FUTJ85** | 9CAF | FM | 50,72 | TP-FM | (4)S3004 | R148DF | NR4J 600mAh | NT8S700B 700mA |
| FUTJ86** | 9CHF | FM | 50,72 | TP-FM | (4)S3001 | R148DF | NR4RB 1000mAh | NT8S700B 700mA |
| FUTJ87** | 9CAP | PCM | 50,72 | TP-FM | (4)S3001 | R149DP | NR4J 600mAh | NT8S700B 700mA |
| FUTJ88** | 9CHP | PCM | 50,72 | TP-FM | (4)S9001 | R149DP | NR4RB 1000mAh | NT8S700B 700mA |
| FUTJ89** | 9CAP | PCM | 75 | TJ-FM | (2)S3004 | R138DP | NR4J 600mAh | NT8iB 600mAl |

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.

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 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!

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.

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 multimodel memory with digital accuracy and utter simplicity.

SANYO Batteries







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











| 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 1000mA | h NT8JY 600mAh |
| FUTK33** | 6XHPS | PCM | 72 | (4)S148 | R138DP | NR4RB 1000mA | h 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.





- 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
- Pitch CurveThrottle Hold
- Servo Travel (AST)
- Idle Up
- Dual Rates on Elevator & Aileron





| 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.





- 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



| 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



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, weightconscious choice for park and indoor flyers.
And in both cases, an exceptionally low price
makes it a perfect fit for any pilot's budget.

Single stick simplicity for sport!

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









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)\$3003 | R114H | _ | _ |
| FUTJ52** | 3FR | FM | 72 | (2)\$3106 | R114F | NR4K 250mAh | NT8JY 600mAh |

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

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



Futaba









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*

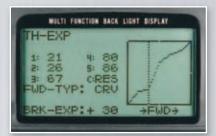
the speed of other systems — a breakthrough so phenomenal that it required the creation of MC Set-Up feature just to bring existing ESCs "up to speed."

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 preset 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

| ĺ | Stock # | System | Modulation | Bands | Servos | Receiver |
|---|----------|--------|------------|----------|--------|----------|
| | FUTJ34** | 3PDFX | FM | 27,75MHz | _ | R133F |

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



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:

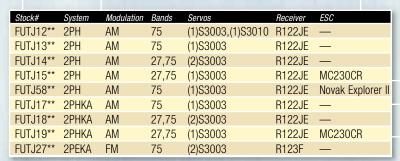
- Durable composite case has an ergonomic design for modeler comfort
- · A wide, flat base distributes battery weight for stability and balanced handling
- · A heavy-duty wheel post and high, surrounding collar provide a more solid feel
- · A smoked panel over the servo reversing switches and battery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





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 pushbutton 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

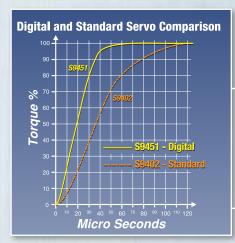
| FUTK01** 2PL AM 75MHz (1) S3003 R142JE — | - |
|--|--------|
| FUTK02** 2PL AM 27,75MHz (2) \$3003 R142JE — | - |
| FUTK03** 2PL AM 75MHz (1) S3003 R142JE MC | C230CR |

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.



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 |
| Dime | nsions | Weight |
| 4.0 | 1 1 1 0 1 | 1.0 |
| 1.9 X | 1.1 x 1.0 in | 1.9 oz |



S9151 Rudder

| 2 | Volts | Torque | Speed |
|---|-------|--------------|--------------|
| п | 4.8V | 131.9 oz/in | 0.19 sec/60° |
| п | 6.0V | n/a | n/a |
| | | | |
| | Dime | nsions | Weight |
| ı | | 0.8 x 1.5 in | |



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 |
| | |



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 |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.5 in | 1.8 oz |
| FIITM | 1222 | |



S9253 Heli Rudder

| Volts Torque | Speed |
|--------------------|--------------|
| 4.8V 27.8 oz/in | 0.08 sec/60° |
| 6.0V n/a | n/a |
| Dimensions | Weight |
| 40 00 45' | 4 7 . |
| 1.6 x 0.8 x 1.5 in | 1./ OZ |



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° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.4 in | 1.4 oz |
| FUTM | 0235 | _ |
| | | |



S9351 High Torque

| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8V | n/a | n/a |
| 6.0V | 180.5 oz/in | 0.15 sec/60° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.5 in | 2 oz |
| FUTM | 1236 | |



S9451 High Torque/High Speed

| JJ-JI High lord | luc/Iligii Spec |
|--------------------|-----------------|
| 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° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.0 in | 1.6 oz |
| FUTM | 0250 | |



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 page19.

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 |
| Dime | nsions | Weight |
| 1.8 x | 0.9 x 1.0 in | 1.5 oz |
| FUTM | 0670 | |



S148 Precision

| Volts | Iorque | Speed |
|-------|--------------|--------------|
| 4.8 | 44.4 oz/in | 0.23 sec/60° |
| 6.0 | 56.9 oz/in | 0.19 sec/60° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.4 in | 1.6 oz |
| FUTMO | 710 | |



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° |
| Dime | ısions | Weight |
| 1.6 x | 0.8 x 1.4 in | 1.6 oz |
| FUTM | 0029 | |



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) |
| FUTMOOOO | |



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° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.4 in | 1.3 oz |
| FUTM | 0031 | |



S3004 Standard

| 2 | Volts | Torque | Speed |
|---|-------------|--------------|--------------|
| | 4.8 | 44.4 oz/in | 0.23 sec/60° |
| | 6.0 | 56.9 oz/in | 0.19 sec/60° |
| | Dime | nsions | Weight |
| | 1.6 x | 0.8 x 1.4 in | 1.3 oz |
| | FUTM | 0004 | |



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° |
| Dime | nsions | Weight |
| 1 x 0 | .5 x 1.2 in | 0.7 oz (21g) |
| FIITM | 1034 | |



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 |
| Dime | nsions | Weight |
| 2.4 x | 1.2 x 2.0 in | 3.4 oz |
| FIITM | 1036 | |



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° |
| Dime | nsions | Weight |
| 2.4 x | 1.2 x 2.0 in | 3.6 oz |
| FUTM | 0035 | |



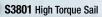
S3305 Standard High Torque

| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8 | 98.8 oz/in | 0.25 sec/60° |
| 6.0 | 123.4 oz/in | 0.20 sec/60° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.5 in | 1.6 oz |
| FUTM | 0045 | |



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° |
| Dimer | isions | Weight |
| 1.6 x | 0.8 x 1.5 in | 1.7 oz |
| FUTMO | 0040 | |



| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8 | 155.5 oz/in | 0.33 sec/60° |
| 6.0 | 194.3 oz/in | 0.26 sec/60° |
| Dime | nsions | Weight |
| 2.4 x | 1.2 x 2.0 in | 3.8 oz |
| FUTM | 0038 | |



S3802 Sail

| | — Oun | |
|-------------|--------------|--------------|
| Volts | Torque | Speed |
| 4.8 | 122.1 oz/in | 0.70 sec/60° |
| 6.0 | 152.7 oz/in | 0.56 sec/60° |
| Dime | nsions | Weight |
| 1.8 x | 0.9 x 1.7 in | 2.6 oz |
| FUTM | 0039 | |



S5301 High Torque 1/4 Scale

| | • | |
|--------|--------------|--------------|
| Volts | Torque | Speed |
| 4.8 | 233.2 oz/in | 0.29 sec/60° |
| 6.0 | 291.5 oz/in | 0.23 sec/60° |
| Dime | nsions | Weight |
| 2.4 x | 1.2 x 2.0 in | 4.4 oz |
| CUITAR | 0054 | |



S9001 Aircraft

Volts Torque

Dimensions

FUTM0075

1.6 x 0.8 x 1.4 in 1.7 oz



\$5302 High Speed 1/4 Scale

| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8 | 188.8 oz/in | 0.19 sec/60° |
| 6.0 | 236.0 oz/in | 0.15 sec/60° |
| Dime | nsions | Weight |
| 2.4) | 1.2 x 2.0 in | 4.4 oz |

4.8 43.0 oz/in 0.18 sec/60°

1.5 x 0.8 x 1.4 in 1.6 oz

Weight

FUTM0052

S9101 High Speed

Volts Torque

6.0 n/a

FUTM085

Dimensions



\$5801 Sail Winch 360°

| Volts | Torque | Speed |
|-------|--------------|---------------|
| 6.0 | 108.8 oz/in | 0.6/r sec/60° |
| 7.2 | 136.0 oz/in | 0.5/r sec/60° |
| Dime | nsions | Weight |
| 1.8 x | 1.0 x 1.8 in | 2.9 oz |
| | | |

FUTM0099



S9102 Aileron

| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8 | 50.0 oz/in | 0.17 sec/60° |
| 6.0 | n/a | n/a |
| Dime | nsions | Weight |
| 1.8 x | 0.9 x 1.0 in | 1.6 oz |
| | | |

FUTM0087



S9202 Aircraft

| | | _ / III OI UI C | |
|---|-------|-----------------|--------------|
| 1 | Volts | Torque | Speed |
| | 4.8 | 76.3 oz/in | 0.26 sec/60° |
| | 6.0 | 98.5 oz/in | 0.21 sec/60° |
| | Dime | nsions | Weight |
| | 1.6 x | 0.8 x 1.4 in | 1.8 oz |
| | CHTM | nnan | |

Weight



\$9206 Heli/Airplane High-Torque

| | • | |
|-------|---------------|--------------|
| Volts | Torque | Speed |
| 4.8 | 131.7 oz-in | 0.19 sec/60° |
| 6.0 | n/a | n/a |
| Dime | nsions | Weight |
| 1.6 x | 0.79 x 1.5 in | 1.9 oz |
| FUTM | 0115 | |



S9402 High Speed

| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8 | 88.8 oz/in | 0.13 sec/60° |
| 6.0 | 111.0 oz/in | 0.10 sec/60° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.5 in | 1.9 oz |
| FUTM | 1102 | |



S9405 High Torque

| | •g | 100 |
|-------|--------------|--------------|
| Volts | Torque | Speed |
| 4.8 | 79.9 oz/in | 0.14 sec/60° |
| 6.0 | 99.9 oz/in | 0.11 sec/60° |
| Dime | nsions | Weight |
| 1.6 x | 0.8 x 1.5 in | 1.9 oz |
| CHTM | nnag | |



S9602 High Speed Mini

| Volts | Torque | Speed |
|-------|--------------|--------------|
| 4.8 | 30.0 oz/in | 0.11 sec/60° |
| 6.0 | 37.5 oz/in | 0.09 sec/60° |
| Dime | nsions | Weight |
| 1.4 x | 0.6 x 1.2 in | 1.1 oz (31g) |
| FUTM | 0107 | |

| | | | S | MA | LL | | | | | | | | | | | | | | S | TANI | DARI | D | | | | | | | | | | | | | | L | ARG | E | | |
|-----------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SERVO USE | S3103/6 | S3107 | S3101 | S3102 | S3002 | S9602 | S9650 | S136G | S3401 | S9405 | S9253 | S9251 | S9206 | S9202 | S9101 | S9102 | S9001 | S3001 | S148 | S3003 | S3004 | S3010 | S3305 | S9402 | S9250 | S9350 | S9351 | S9451 | S9150 | S3802 | S9151 | S9252 | S9550 | S5801 | S3801 | S3104 | S3302 | S5301 | S5302 | S5050 |
| Car | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mini car | | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GP car | | | | | | | | | • | | | | | | | | • | • | • | • | • | • | | | | | | | | | | | | | • | | | • | • | • |
| EP car | | | | | | | | | • | | | | | | • | • | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| Boat | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EP,GP boat | | | | | | | | | • | | | | | • | • | • | • | • | • | • | • | • | • | | | | | | | | | | | | • | | • | • | • | • |
| Yacht | | | | | | | | | • | | | | | • | • | • | • | • | • | • | • | • | • | | | | | | | | | | | | | | | | | |
| Airplane | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glider | | | | | | | | | | | | | | | | • | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| EP plane | • | • | • | • | • | | | | | | | | | | • | • | • | • | • | • | • | • | | | | | | | | | | | | | | | | | | |
| Small plane | | | • | • | • | | | | | | | • | • | • | | | • | • | • | • | • | • | | | • | | | | | | • | • | | | | | | | | |
| Airplane | | | | | | | | | | • | _ | | _ | • | | | • | • | • | • | • | • | | • | | • | • | • | _ | | _ | • | | | • | • | • | • | • | • |
| Helicopter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EP helicopter | | | • | • | • | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Helicopter | | | | | | | | | | | ▝ | | ▝ | ▝ | | | • | • | | | | • | | | ▝ | | • | | | | • | | | | | | | | | |
| Features | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ball Bearings | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | | | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Metal Gear | | | | * | * | * | | | | * | | * | * | | | | | | | | | | * | * | * | * | * | * | | * | | | * | * | * | | * | * | * | * |
| Water Protected | | | | | | | | • | • | • | • | • | • | • | • | • | | | | | | | | ♦ | • | • | • | • | • | • | • | • | • | • | • | • | + | + | • | • |

■ = Recommended • = Compatible

| | 100 | |
|----------|---------|----------------------------------|
| | SERV | O 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) |



| | | S | ERVO CONNECTORS | |
|---|---------------|-----------------|-------------------------------------|----------------|
| | Stock # | Part # | Style/Application | Legnth |
| | 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 |
| П | FUTM3810 | FPC3MF | G-Type Male/Female Servo Connectors | 6 in |
| | FUTM3820 | FPC8F | J-Type Nicd Male Connector | 3 in |
| | PC8J -Type | FPC8M J-Type | | PC8F I-Type |

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

FST28V

| GEAR SETS | | | CASE S | ETS | 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 | | | | | | |







FST28T

GY GYROS

SMM SILICON MICRO MACHINE TECHNOLOGY

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



- 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



- 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

- 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

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

GYA-351



- FUTM0817
- Designed for dual aileron applications, such as flaperons
- "Dampens" oscillations and helps the airplane maintain a constant heading

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

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)

CE (27 MHZ)

A3 Orange

A4 Yellow

A5 Green

A6 Black

Low Band FUTL0411 High Band FUTL0436

RADIO FREQUENCY ORDERING INFORMATION Ch. Ch. 24 72.510 72.010 11 72.270 36 72.770 49 72.290 25 72.530 72.790 72.030 12 37 50 72.550 72.050 13 72.310 26 38 72.810 51 72.070 72.330 27 72.570 39 72.830 52 72.090 15 72.350 28 72.590 40 72.850 53 72.370 72.610 72.110 29 72.870 16 41 54 30 72.130 17 72.390 72.630 42 72.890 55 72.150 72.410 31 72.650 43 18 72.910 56 72.170 19 72.430 32 72.670 44 72.930 57 72.190 20 72,450 33 72.690 72.950 45 58 72.210 21 72.470 34 72.710 46 72.970 59 72.230 22 72.490 72.730 47 72.990 60 72.250 23 72.750 48

| | CARS & BOATS (75 MHZ) | | | | | | | | | | |
|-----------|-----------------------|--------------|--------|-------------|-----|--|--|--|--|--|--|
| Frequency | Ch. | Frequency | Ch. | Frequency (| Ch. | | | | | | |
| 75.410 | 61 | 75.610 | 71 | 75.810 | 31 | | | | | | |
| 75.430 | 62 | 75.630 | 72 | 75.830 8 | 32 | | | | | | |
| 75.450 | 63 | 75.650 | 73 | 75.850 8 | 33 | | | | | | |
| 75.470 | 64 | 75.670 | 74 | 75.870 | 34 | | | | | | |
| 75.490 | 65 | 75.690 | 75 | 75.890 | 35 | | | | | | |
| 75.510 | 66 | 75.710 | 76 | 75.910 8 | 36 | | | | | | |
| 75.530 | 67 | 75.730 | 77 | 75.930 8 | 37 | | | | | | |
| 75.550 | 68 | 75.750 | 78 | 75.950 | 88 | | | | | | |
| 75.570 | 69 | 75.770 | 79 | 75.970 8 | 39 | | | | | | |
| 75.590 | 70 | 75.790 | 80 | 75.990 | 90 | | | | | | |
| To ordo | r 0 01/ | rtom on a cn | ooifio | fraguanav | | | | | | | |

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 I FREQ | NETE UEN | |
|-------------|-------------|------------|
| (50 |) MH | <i>Z</i>) |
| Freque | ency | Ch. |
| 50.8 | 00 | 00 |
| 50.8 | 20 | 01 |
| 50.8 | 40 | 02 |
| 50.8 | 60 | 03 |
| 50.8 | 80 | 04 |
| 50.9 | 00 | 05 |
| 50.9 | 20 | 06 |
| 50.9 | 40 | 07 |
| 50.9 | 60 | 08 |
| 50.9 | 80 | 09 |

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 | Weigh | t Ant |
| 1.7 x 1.1 x 0. | 7 in 0.56 o | z 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 | Weig | ıht Ant |
| 1.5 x 1.0 x 0. | 6 in 0.5 o | z 19.6 in |



R203HF -

| | P110 4444-01-0-1 | III THE OWNER OF |
|---------------|------------------|------------------|
| Band | Stock # | Xtal St # |
| 27MHz | FUTL0340 | FUTL61** |
| 50MHz | n/a | |
| 72MHz Low | n/a | |
| 72 MHz High | n/a | |
| 75MHz | FUTL0344 | FUTL64** |
| Dimensions | Weigl | ht Ant |
| 1.5 x 1.0 x 0 | .6 in 0.63 (| oz 19.4 in |



| Band | Stock # | Xtal St # |
|-----------------|-------------|-----------|
| 27MHz | FUTL0300 | FUTL51** |
| 50MHz | n/a | |
| 72MHz Low | n/a | |
| 72 MHz High | n/a | |
| 75MHz | FUTL0304 | FUTL52** |
| Dimensions | Weigh | t Ant |
| 1.7 x 1.1 x 0.4 | 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 |
| 19x13x0 | 8 in 0.93 oz | 39 in |



| Band | Stock # | Xtal St # |
|----------------|-------------|-----------|
| 27MHz | n/a | |
| 50MHz | n/a | |
| 72MHz Low | FUTL0442 | FUTL62** |
| 72 MHz High | FUTL0443 | FUTL63** |
| 75MHz | n/a | |
| Dimensions | | nt Ant |
| 1.3 x 0.8 x 0. | 5 in 0.36 d | z 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 |
| 26 4 1 4 4 0 | Q in 1/07 | 20 / in |



Stock #

FUTL0802

FUTL0804

2.6 x 1.4 x 0.8 in 1.4 oz 39.4 in

n/a

n/a

72 MHz High FUTL0803

FUTL52**

Xtal St #

FUTL57**

FUTI 58**

Band

27MHz

50MHz

75MHz

72MHz Low

Dimensions

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 | Weigh | nt Ant |
| 2.2 x 1.0 x 0. | 9 in 1.1 oz | 38.8 in |



R148DP — 8-Channel PCM Micro R149DP — 9-Channel PCM

| | · · · · · · · · · · · · · · · · · · · | |
|----------------|---------------------------------------|-----------|
| Band | Stock # | Xtal St # |
| 27MHz | n/a | |
| 50MHz | FUTL0821 | FUTL56** |
| 72MHz Low | FUTL0822 | FUTL57** |
| 72 MHz High | FUTL0823 | FUTL58** |
| 75MHz | n/a | |
| Dimensions | Weigh | t Ant |
| 2.2 x 1.0 x 0. | 9 in 1.1 oz | 38.8 in |
| | | |



| ועטדווו | Jonannon | OWI |
|----------------|-------------|-----------|
| Band | Stock # | Xtal St # |
| 27MHz | n/a | |
| 50MHz | FUTL0901 | FUTL56** |
| 72MHz Low | FUTL0902 | FUTL57** |
| 72 MHz High | FUTL0903 | FUTL58** |
| 75MHz | n/a | |
| Dimensions | Weigh | t Ant |
| 2.2 x 1.3 x 0. | 8 in 1.2 oz | 38.8 in |



R309DPS — (Synthesized) PCM

| 1100001 | (O)IIIIIOOIZ | ou) i oiii |
|----------------|--------------|------------|
| 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

Transmitter Modules

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





FUTL15**

| 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 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 |



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

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

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

FS-I 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-IO 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

SRIO 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.



FUTM4150

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

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



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

GV-I 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

FUTM1001

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)

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.





- Forward/Reverse/Brake
- 1.5kHz Switching Rate
- 5.0V BEC
- Reverse Lock-Out for sport driving and ROARlegal 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 "pulsina"
- Futaba J receiver, Bullet motor and JST battery connectors installed

MC800C Pro



- 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

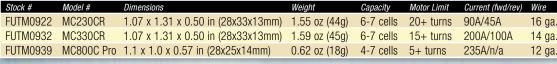
Worlds Kit

FUTM0939

· High-end enhancement for the MC800C Pro

 Includes high-power large **FUTM0940** and small capacitors, redesigned heat sink head, heat shrink tubing and decal sheet.

| | Capacity | Motor Limit | Current (fwd/rev) | Wire |
|---------|-----------|-------------|-------------------|--------|
| (44g) | 6-7 cells | 20+ turns | 90A/45A | 16 ga. |
| (45g) | 6-7 cells | 15+ turns | 200A/100A | 14 ga. |
| (1 Q n) | 1-7 calls | 5 turne | 2351/n/a | 12 na |



Extensions & Charge Cords





| Stock # | Part # | Description | Legnth |
|----------|--------|-----------------------------------|--------|
| 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

| 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

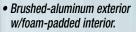
With a Direct Servo Control (DSC) cord, you can test servo response without sending a signal — great for last-minute adjustments in the pits.

FUTM4385

| 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 |



Radio Cases & Bags



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)



| 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 Amerinas |
|---------|--------------------------|
| UTM1610 | AL0142 AM 39.4" (1000mm) |
| UTM1620 | 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 |

Appar∈I

air holes. (FUTZ7087)

Official Futaba Hat

Lightweight, 100% cotton cap offers good looks, eve protection and easy washing. Plastic strap adjusts to fit virtually any head. Off-white, with dark green Futaba logo, bill &

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.



Futaba



Futaba Futaba Futaba PRINTER Fuente Futaba Futaba Children Feeste Feeste Futaba Futaba



Futaba **Futaba**

MonoKote Trim Sheet - Large (FUTZ3501)



Banner Heavy-duty Tyvek sign w/brassreinforced 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, 6NHP, 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.







Visit Futaba online.



It's all as close as your computer.

www.futaba-rc.com

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

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.