

# 14MZ™

14-Channel Computer Radio



# The Re-invention of Radio Control.

Like no radio system before it, the 14MZ is a complete, multi-media experience. In addition to groundbreaking radio technology, it employs state-of-the-art digital sound and graphic capabilities to make controlling your aircraft more precise and interactive than ever before.



**14MZ**  
PCM3PM DIGITAL PROPORTIONAL  
RADIO CONTROL SYSTEM  
G3 PCM2048

**Futaba**  
DIGITAL PROPORTIONAL R/C SYSTEM

Antenna

Display Screen Cleaner

DSC (Direct Servo Control) Cord

Transmitter Neck Strap

Stylus/Wrench Box

R5014DPS PCM G3  
2048 Receiver 72MHz

Heavy-Duty Switch Harness

7.4 V 2200mAh  
Lithium-Ion  
Transmitter Battery

Receiver NiCd Battery Charger

1500mAh Receiver  
NiCd Battery

32MB Compact  
Flash Memory  
Card

Transmitter Li-Ion Battery Charger

## Innovative technologies developed specifically for the 14MZ!

### • Dual Internal Processors

A custom Futaba processor directs all critical flight control functions. Input for general operating tasks — such as set-up and programming — is processed separately by Windows CE.



### • Real-Time Response™

Breakthrough PCM G3 2048 enables servos to pick up the slightest stick movements. Frame rate is 40% faster than even Futaba's 9Z — contributing to response so immediate, it feels like "real time."

Note: The 14MZ can also transmit in 1024 PCM and FM/PPM.

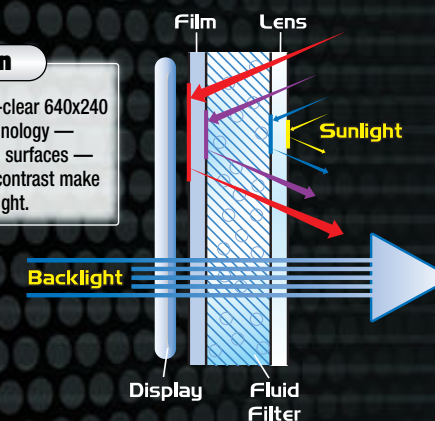
REAL TIME RESPONSE™

input → response

PCM  
G3  
2048

### • Full-Color Touch Screen

The HVGA screen features crystal-clear 640x240 pixel resolution. Transflective technology — layered transparent and reflecting surfaces — plus adjustable backlighting and contrast make it easy to read even in direct sunlight.



### • Intuitive Programming

The graphic interface makes it easy to navigate through programming options. From the startup screen, three secondary menus logically separate and organize different programming categories. Moving from menu to menu takes only a touch.



"Touch n' Go"  
Programming

### • R5014DPS Receiver

Uses state-of-the-art Ball Grid Array (BGA) layered PC board technology. WFSS (Wireless Frequency Setting System) simplifies frequency changes — make them right from the transmitter, without changing crystals!



### • Compact Flash Card Data Storage and Transfer

32MB Compact Flash card lets you increase memory to 100 models...upload digital images of your aircraft for the display menu...or create and store audio files.



### • Windows Media Player

Save WMA (Windows Media Audio) files on the Compact Flash card and listen to them through earphones or the transmitter's built-in speaker.

### • Longer Sound File Playback

Want to fly to recorded music or verbal sequences? Establish your sequence, record it as a digital WMA file, load it onto the CF card...and with the card in your transmitter, assign the file to a switch for playback.

### • Voice Prompts

Record up to 24 voice prompts on the CF card by speaking into the transmitter's built-in mic. Assign them to specific switches to hear audio confirmation — such as "Landing gear down!" — when you move the control.

### • Servo Grouping

Each servo's EPA can be adjusted separately, so that control surfaces requiring multiple servos can be programmed to work simultaneously without a separate servo synchronizer.

Servo Grouping

Synchronized™



### • Switch Customizing

Reconfigure the eight 14MZ shoulder switches to your own preference. Just pull out a switch to remove it, and plug in the style you prefer — tall or short, button or toggle, spring-loaded or positionable.



### • Stick Customizing

A tension adjustment lets you tailor stick "feel" to your own touch. Dual ball bearings on each axis and a long-life potentiometer ensure smooth, precise control.

# Unmatched functionality meets unparalleled user-friendliness.

## LED Flashing status

color	mode	condition
yellow	fast blink	Powering up/powering off
yellow	slow blink	Start up error
purple	on	Ready without RF power
sky blue	slow blink	Setting frequency mode
purple	on	Frequency setting mode
blue	on	Trainer/student mode
red	slow blink	RF module error
green	on	Ready with RF power

## • Seven-Color LED Indicator

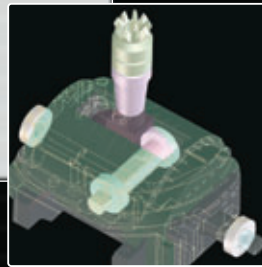
## • Customizable Switch Banks (right and left)

## • Rotary Dial

## • Auxiliary Channels (2)

## • Quad-Bearing Gimbals

- Gimbals with long-life potentiometer, quad bearings, adjustable tension and detent.



## • Digital Trim Switches (4)

## • Rotary Dial Setting Selector

## • Programmable Direct Keys

## • Compact Flash Card Drive

- Increase model memory to 100 models.
- Download digital images for the display menu.
- Create and store Windows Media audio files.
- Upgrade programs and functions.

## • R5014DPS Receiver

- Ball Grid Array (BGA) layered PC board technology eliminates space-wasting pins.
- Wireless Frequency Setting System (WFSS) lets you change frequencies without changing crystals.
- Transmitter can be programmed to operate two receivers simultaneously — a great advantage for pattern and large-scale modelers.

Weight: 32g  
Dimensions: 37.7mm wide x 52.2mm long x 16.3 mm high



## • 14 Ports

## • Frequency Change Confirmation LED

## • Full-Color Touch Screen Display

- Highly graphic, full color display — can use digital images of your aircraft as model names, along with 32-character model naming.
- Clear, 640x240 pixel resolution.
- Anti-glare filter and adjustable screen contrast.
- Monitor battery capacity, trim positions, and other critical parameters with a glance.
- Cuts programming time in half.
- Editing can also be done by Dial-N-Key to scroll and select.



## • Handle

## • Antenna Mount

- Plug-in swivel antenna with antenna storage in transmitter base.

## • Pre-Programmed Mixes

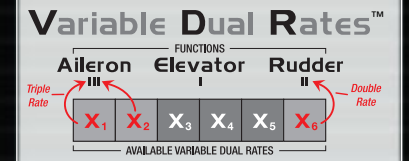
- Seven wing types, 4 tail types, and 3 motor types are already programmed into the 14MZ.
- Built-in shortcuts save programming time — just select the set-up you need!

## • Finely Tuned Setting Adjustments

- Adjustments are made in ultra-precise 0.5% increments, compared to the 1% of other radios.
- "Fast forward" option makes setting changes more quickly, in larger 5% increments.

## • Variable Dual Rates™ (VDR)

- Six factory-set Variable Dual Rate (VDR) curves can be assigned to any function in any flight condition configuration.
- Variable Dual Rates (VDR) and Expo can be combined so they are automatically activated when a function is activated — no program mixing required.



## • Retractable Knobs (2)

## • Slider Arms (4) (right and left)

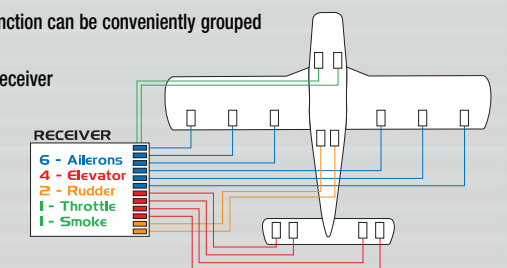
## • Speaker

## • Microphone

## • Neckstrap Eyelet

## • Servo Grouping™

- Multiple servos controlling a single function can be conveniently grouped onto one transmitter operation.
- Servos can be plugged into different receiver channels, even non-consecutively.
- Each servo's EPA can be adjusted individually from the transmitter so that no separate servo synchronizer is needed for mixing.



## • Synthesized RF Module

## • Slider Arms (for easy fingertip rotation)

## • Gimbal Stick Adjustment Ports

## • DSC/Trainer Cord Jack

## • Rubber Grips

## • Battery Box

## • Earphone Jack

## • Battery Charging Jack

## • Lithium-Ion Battery



## • 14MZ Specifics:

- 2048 G3 PCM resolution — twice that of other high-end radio systems.
- "Backwards compatible" with FM/PPM, and 1024 PCM.
- Combines airplane and glider functions conveniently into one program.
- Supports 13 different wing types, 3 tail types, 3 motor types and 7 heli swash types.
- Offers 9 total flight conditions (8 plus the default).
- Handles up to 32 selectable functions.
- Features digital trims on all 4 main channels.

## • Access Door

## • Antenna Storage



# 14MZ Programming Menus

The most instantly noticeable innovation of the 14MZ is its full-color, touch screen display. Text characters are supplemented with graphics and, if desired, your own digital photos to convey a huge amount of information clearly and efficiently.

## MAIN NAVIGATION (STARTUP) SCREEN



The speed of the touch screen — and the brilliantly intuitive structure of the programming menus — allow any flier to make creative programming modifications quickly and with complete confidence!

## SYSTEM MENU



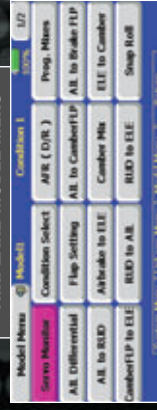
The System Menu consists primarily of functions which are used to set up the 14MZ transmitter. These remain constant for whatever model and flight conditions you select from the Linkage and Model Menus.

## LINKAGE MENU



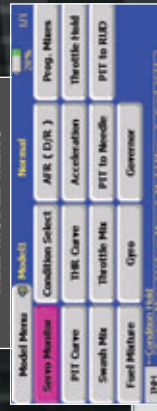
Functions that stay constant for any given model you select, even after a change in flight condition, are organized within the Linkage Menu. These basic settings include Model Addition, Model Type, Frequency, End Point, and more.

## AIRPLANE MODEL MENU



The changing flight situations that your model encounters demand different set-ups that you can use in an instant. You'll program and engage these specific flight conditions for your airplane, helicopter, glider or jet in the Model Menu.

## HELICOPTER MODEL MENU



### SERVO MONITOR

### CONDITION SELECT

### AFR (D/R)

### PROG. MIXES

### PITCH CURVES

### THROTTLE CRV

### ACCELERATION

### THROTTLE HOLD

### SWASH MIX

### THROTTLE MIX

### PIT TO NEEDLE

### PIT TO RUD

### FUEL MIXTURE

### GYRO

### GOVERNOR

### SERVO MONITOR

### CONDITION SELECT

### AFR (D/R)

### PROG. MIXES

### AIL DIFFERENTIAL

### AIL TO RUD

### AIRBRAKE TO ELE

### CAMBER MIX

### ELE TO CAMBER

### RUD TO AIL

### RUD TO ELE

### SNAP ROLL

### AIRBRAKE

### FUEL MIXTURE

### MULTI ENG

### GYRO

### SERVO MONITOR

### MODEL SELECT

### MODEL TYPE

### PICTURE

### SOUNDS

### FREQUENCY

### FUNCTION

### SUB-TRIM

### SERVO REVERSE

### FAIL SAFE

### END POINT (ATV)

### THROTTLE CUT

### IDLE DOWN

### TIMER

### DUAL MONITOR

### DATA RESET

### TRAINER (TEACHER)

### DISPLAY

### DATE & TIME

### USER NAME

### SWITCH

### H/W REVERSE

### INFORMATION

**14MZ**  
Intuitive.  
Interactive.  
In a league of its own.

**14MZ.COM**



### Futaba 14MZ Flyers Club

Futaba 14MZ owners are entitled to FREE membership into the Futaba 14MZ Flyers Club — an elite association of modelers who share an appreciation for the finest equipment available in the R/C hobby. As a registered Flyers Club member, you'll receive exclusive access to 14MZ merchandise as well as periodic update information and special offers.

Intuitive. Interactive. In a League of its Own.

## 14MZ.com

The dedicated information resource for 14MZ owners.

### Futaba 14MZ Website



More information about the 14MZ is as close as your computer, at [www.14MZ.com](http://www.14MZ.com). You can also take a "virtual tour" of the 14MZ transmitter...read the latest product reviews...subscribe to receive e-mail notifications of site updates...and more.

[www.14mz.com](http://www.14mz.com)

### Futaba Service Center

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 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 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 a 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.

# Futaba®