

MatchMaker Instructions

JRPA915

FUNCTIONS (cont'd)

There are 5 open ports on the end of the MatchMaker, labeled 1, 2, 3, 4 and Batt.

- Ports 1 and 2 are for variable speed servo cycling.
- Ports 3 and 4 are for Servo Centering and positioning the servo at any point in its travel.
- Batt is to attach a 4.8 to 6.0V battery pack for a power source.

FEATURES

- Allows the precise digital centering of up to 2 servos at a time to help with setup on the building bench.
- Allows for the cycling of up to two separate servos at a time at variable speed rates.
- Perfect for finding erratic servo behavior in the cycling mode.

SPECIFICATIONS

- Size 1.54" (L) x .74" (H) x .50" (W)
- Weight .32 oz
- Operating Voltage 4.8—6.0V

INTRODUCTION

Thank you for the purchase of JR's newest high-value accessory, the MatchMaker. The MatchMaker is designed to provide ultra-precise centering of up to two servos during setup of the control systems without transmitter and receiver active, and/or variable speed cycling of up to 2 separate servos at the same time.

FUNCTIONS

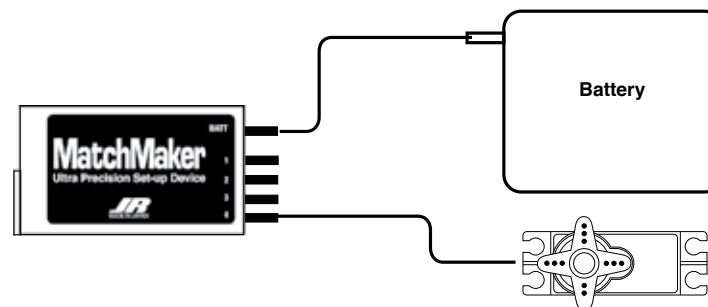
The various functions of the MatchMaker servo-testing device are accessed through the various plug-in ports and the rotary dial found on the end of the case.

The Rotary dial serves two functions.

- When used in the servo setup mode, the rotary dial provides for the precise centering of the servo when the dial is rotated to the center of its travel. This center-point is easily identified by a positive detent in the rotary dial.
- When used in the cycling mode, the rotary dial serves to vary the speed that the servos cycle from end point to end point. Rotating the dial clockwise will increase the speed of the servo cycling, and rotating counter-clockwise will decrease that speed.

CONNECTIONS

- To access the variable speed servo cycling and testing functions, connect one or two servos to ports 1 or 2.
- To access the servo centering and adjustment functions, connect one or two servos to ports 3 or 4.
- Connect a charged 4.8V (4-cell) or 6.0V (5-cell) battery pack to the Batt port to provide power for the setup or cycling/testing functions.



Variable Speed Servo Cycling Mode

A great diagnostic feature of the MatchMaker is to use its variable rate cycling mode to identify glitches and/or stutter points in your servo's movement. By plugging into either port 1 or 2, and rotating the dial clockwise to slow the rotation, you can readily see any steps, stops, or jumps in the movement of your servo.

At the indication of any one of these issues we suggest that you return the servo to your repair station for maintenance, as there may be a geartrain problem, a servo pot problem, or a motor problem.

Another great feature of the variable speed cycling mode is the ability to check the actual operating speeds of two identical servos. This would also

be helpful when matching two servos for use on one control surface. By attaching an elongated pointer to each of two servo arms, attaching these to two identical servos, and plugging both servos into the MatchMaker in ports 1 and 2, one can easily see a difference in speed by observing the movement of the elongated pointers.

Servo Centering and Adjustment Mode

One of the best functions of the MatchMaker is finding the center of the servo travel so that your servo arms can be attached to the servo output gear with the correct orientation without using a transmitter and receiver! To accomplish this, simply center the rotary dial at the center detent and plug the servo(s) into either port 3 or 4. It is usually best to have the output arm of the servo

parallel to the servo horn on the surface or function to be activated. This insures that there will be equal movement of the surface and/or function on either side of the center-point of travel. Most servo brands have an odd number of teeth on the splined servo output gear. What this allows is that, by rotating the servo arm you plan to use by 90, 180 or 270 degrees, you are sure to find the perfect position that will give you the alignment you are seeking.

By rotating the rotary dial on the MatchMaker to either extreme, you will find the travel end points of the servo. You can use this feature to match the extremes of the servo travel to the desired surface travel. You can set the surfaces as close to nominal as you can mechanically, and then

fine-tune the arrangement with the end-point adjustment feature found in most of today's computer radios. And all without ever turning on your transmitter or using a receiver! Another great feature of the servo travel mode is the ability to check and see if the actual end points of two identical servos match. This would be helpful when matching two servos for use on one control surface, etc. By attaching an elongated pointer to each of two servo arms, attaching these to two identical servos, and plugging both servos into the MatchMaker in ports 1 and 2, one can easily see a difference in servo position at any point in the travel by observing the movement of the elongated pointers.

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Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

Safety Precautions

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase

cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at

www.horizonhobby.com on the “Support” tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Non-Warranty Repairs

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. Please note: non-warranty repair is only available on electronics and model engines.

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822

Please call 877-504-0233 or e-mail us at productsupport@horizonhobby.com with any questions or concerns regarding this product or warranty.