

e **BANDIT EVO**

GO FLY GOLD



Length: 76", Wing Span: 67"

12s-14s EVF Unit

ASSEMBLY AND OPERATING MANUAL

Version 2

April 2024

Equipped with HV Servos and should not be operated below 7.2 volts

CCU Pressure should be 75 PSI MAX

BVM

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eBandit Evo
Assembly & Operation Manual

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INTRODUCTION

Thank you for purchasing theGo FlyeBandit Evo. This model represents the latest in manufacturing technology and completion for the R/C jet enthusiast. The factory has expertly crafted and thoroughly inspected all aspects of the model. Only a small amount of work is required to complete the assembly of your eBandit Evo.

This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all of the instructions and warnings in the manual.

Please read the entire manual to become familiar with the processes and procedures before you begin to assemble your aircraft.

Disclaimer

Bob Violett Models Inc. assumes no liability for the operation and use of these products. The owner and operator of these products should have the necessary experience and exercise common sense. Said owner and operator must have a valid Academy of Model Aeronautics license for operation in the U.S.A.

This is a sophisticated model aircraft. 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.

Notice: Do not use with incompatible components or alter this product in any way outside of the instructions provided by BVM, Inc. The BVM eBandit Evo has been designed and flight tested 12s - 14s EVF units.

List of BVM supplied items

- Assembly and Operating Manual Package
- Mylar Thrust Tube Installed in Model
- Central Controller Instructions
- Mylar Thrust Tube Manual
- Thrust Tube Tape
- Switch Mount

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Recommended Accessories

You may have some of these products in your shop, but if not, refer to this list.

- 12s -14s EVF Unit.
- BVM Power Plug 3 (E1000-23)
- Thunder Power 12s Batteries (TP7700-12SR70D)
- 12 Channel Power Safe Receiver (SPMAR12310T)
- (2) 7.4v Batteries 3600 mAh RX (V-PLURX15-36002)
- Bavarian Demon Aero Cortex Pro Gyro (#V-DA-BD-Cortex Pro)
- General Purpose Jet Foam Cradle (#PA-SR-0080)



BVM Accessories Used in Demo Model

You may have some of these products in your shop, but if not, refer to this list.

- 12s EVF Unit
- BVM Power Plug 3 (E1000-23)
- Thunder Power 12s Batteries
- Spektrum 9 Channel Telemetry Receiver (SPMAR9030T)
- (1) 7.4v Batteries Pulse 3600 mAh RX (V-PLURX15-36002)
- Spektrum X-Plus 8 Expander (SPMX8000)
- Bavarian Demon Aero Cortex Pro Gyro (#V-DA-BD-Cortex Pro)

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Required Tools

A combination of Metric and SAE hex socket and drivers along with a small standard and phillips head drivers will be necessary.

- 9/64" Long Ball Driver

List of Adhesives/Lubricants needed Available at BVMJets.com

- Super O-Lube # 5779
- Axle Super Lube # 5784
- Dry Lube # 1947
- Pacer Z-42 # PT42

List of Adhesives/Lubricants not necessarily needed Available at BVMJets.com

- BVM Aeropoxy # 9566
- BVM Qt Poxly # 9580
- Zap-A-Goo # PT12
- BVM Thin Lube for "O" Rings # 1945



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UNPACKING

Carefully remove items from the box. Open each package and inspect for shipping damage. After reading this entire manual, get familiar with the major kit components.

NOTE: Damaged parts must be reported to BVM within 7 days of receiving your kit. Become familiar with the work completed at the factory. It is important that you inspect and approve this work now.

Using a stand, such as the BVM General Purpose Jet Foam Cradle (PA-SR-0080) will aid in the assembly of the Bandit Evo.



Carbon Dowel Preparation

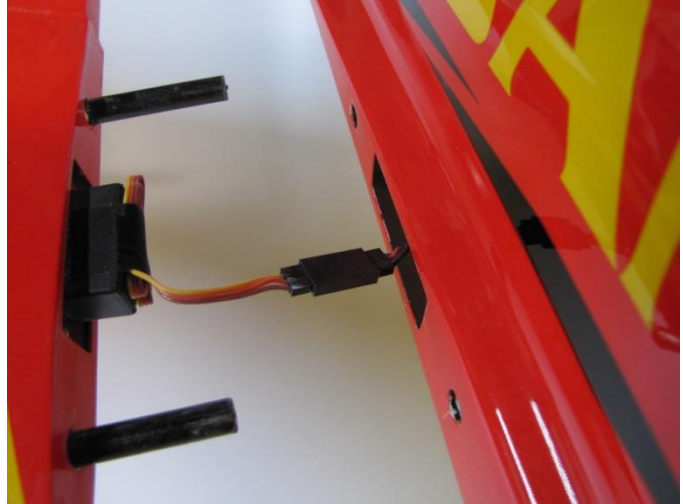


- Use BVM Dry Lube (BVM# 1947) on the Carbon Rods to allow easier installation into the wing and tail receptacles.

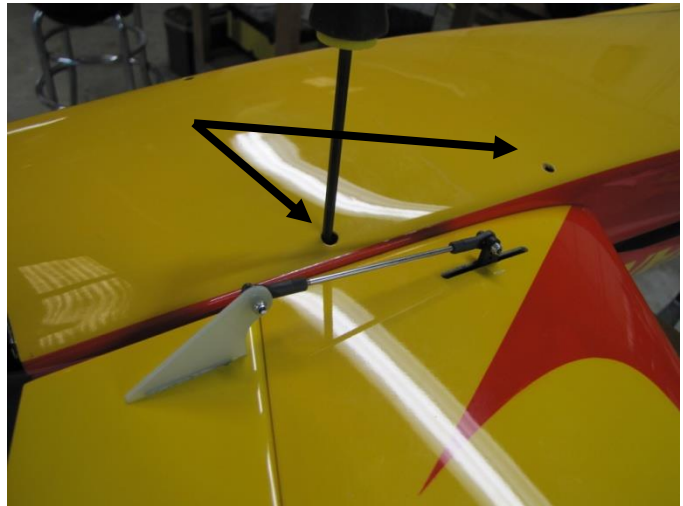
INSTALLING TAIL SURFACES

Install the Stabs

- Connect the servo leads and secure with servo clips or tape.
- Insert the Carbon Rods fully into the receiver brackets.



- Secure each stab by tightening the bolt with a 9/64 ball wrench.



Install the vertical fin

- Connect the servo leads and secure with servo clips or tape.
- Insert the Carbon Rods into the receivers.



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- Secure the vertical fin by tightening the clamps bolts with a 9/64 ball wrench.

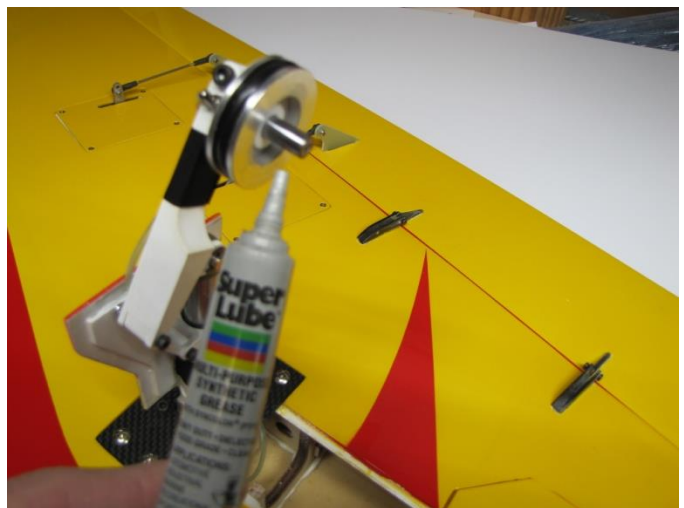


WING PREPERATION AND INSTALLATION

- Lubricate the O'Rings with Super O-Lube (BVM#5779).



- Lubricate the axles with Super Lube (BVM# 5784).



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- Connect the servo leads and secure with servo clips or tape.
- Connect the color coded Air Lines
- Insert the Carbon Rods into the receivers.



- Secure each wing by tightening the (4) clamp bolts with a 9/64 ball wrench.



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EQUIPMENT BOARD LAYOUT

NOTE: The color of the equipment board will be white with all paint schemes. (See page 10 for Servo wiring.)



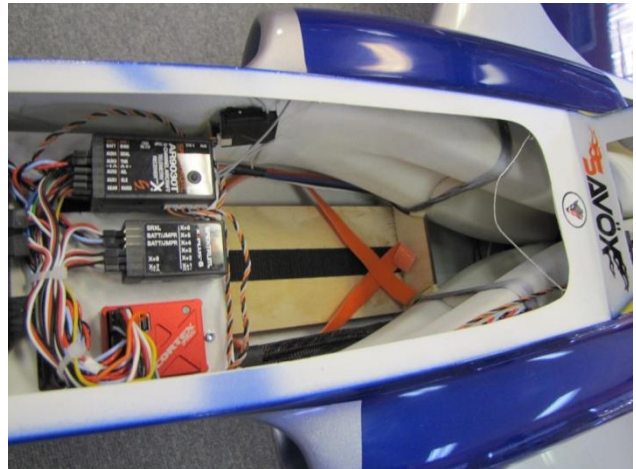
Gray- Brake
Blue- Gear Up
Red- Gear Down
White- Door Open
Black-Door Close

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Mounting the RX

- Use sticky back Velcro to mount the RX as shown. Mount Remote Receivers in various positions following the recommendations for your particular R/C system and range check accordingly.

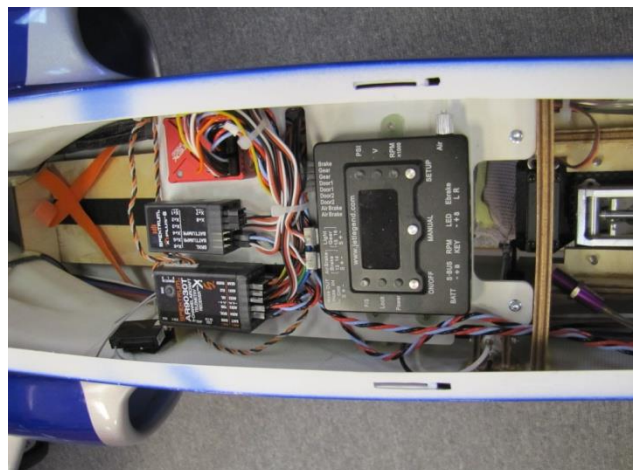


You can install the Receivers ON/OFF switch in the provided mount and install it in a location like the one shown here.



Mounting the Gyro

Use the space left of the Receiver to mount the Gyro of your choice. Use the 2-sided adhesive tape provided by the Gyro manufacture to adhere the gyro in place. Follow the manufacture guidelines to connect to the receiver.



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Wiring The Model

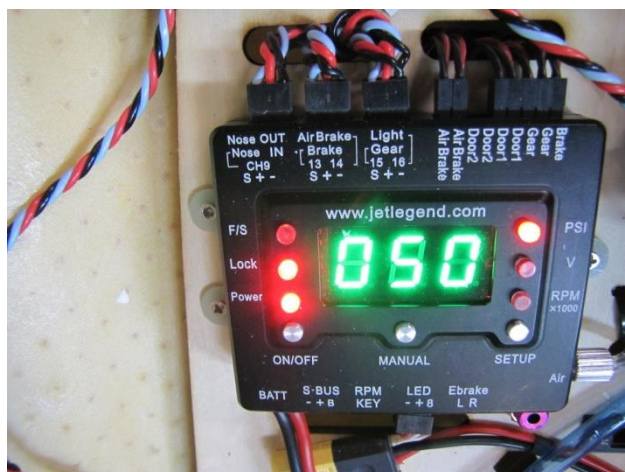
Servo Wire Color Codes		
Throttle		NA
Rudder		Blue
Elevator	Left	Green
Elevator	Right	Purple
Aileron	Left	Orange
Aileron	Right	Yellow
Flap	Left	Brown
Flap	Right	Grey
Brake		Red
Steering		Black



Note: Newer Models use WHITE instead of Purple for Right Elevator.

Central Control Unit

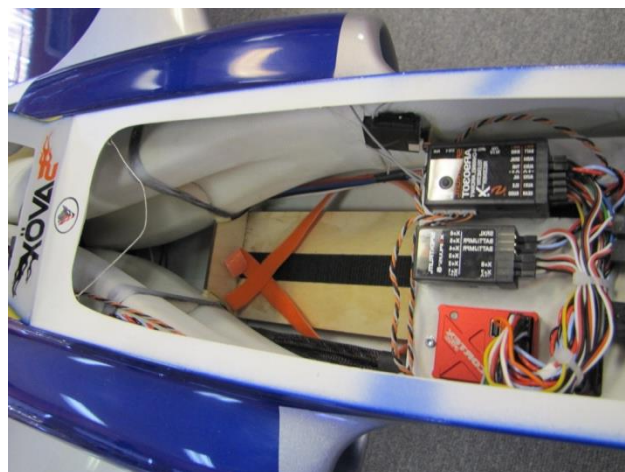
Follow the instruction in the Central Control Unit Manual that was provided along with this manual.



BATTERY TRAY PREPERATION

Apply a thin coat of CA to the front battery tray at this time This will give the Velcro a smooth surface to stick to. We use a single strip of Velcro down the middle and a strap around the tray to hold the battery in place.

NOTEThe front battery tray can hold two packs.



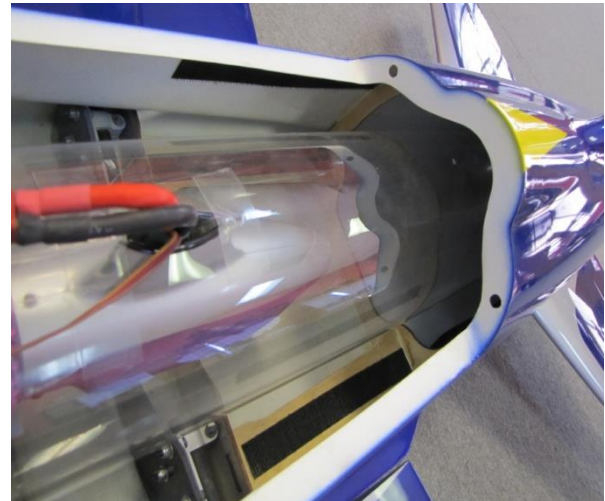
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- The rear trays also need to have a Zap CA finish on them as well



One strip of Velcro on the side and one under the battery is all we use to hold the pack in place. This is the same on the left and right.



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EVF MOUNTING

- Slide the EVF Unit over the flange until you feel it stop. Once this is done center the EVF in the mount and drill and tap 4 holes for the 4-40 bolts that come with the EVF Unit. Apply a drop of CA to each hole then run the Tap into the holes one more time.



NOTE: When running the fan for the first time listen for any rubbing.

THRUST TUBE INSTALLATION

The thrust tube is already in the model when it comes. The only thing left for you to do is drill 2 small 1/16th holes, install button head screws, and tape the seam shut. The thrust tube has two laser cut holes in it already, this is your guide for drilling the EVF unit to accept the 2 button head screws that hold it to the EVF unit.

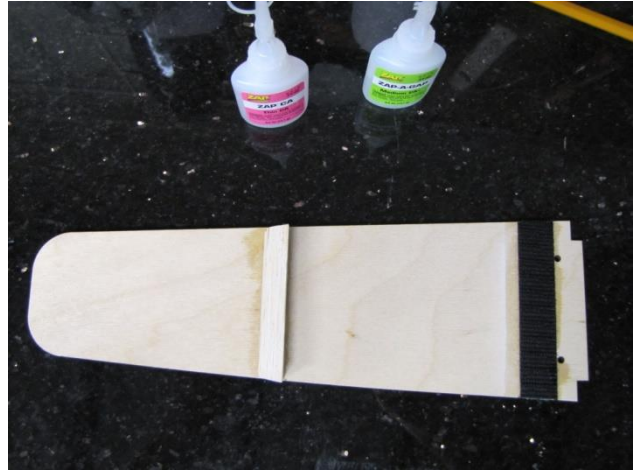


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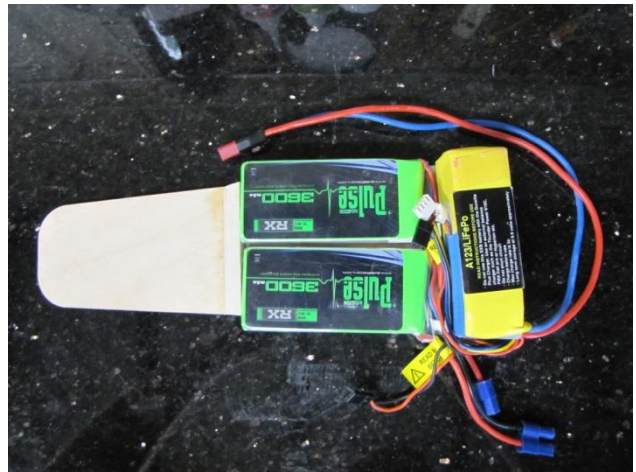
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Mount RX Battery or Batteries

- Apply a ZAP finish near the (2) screw holes and install a piece of adhesive backed Velcro for the turbine battery as shown. Glue on a balsa block to hold the RX Battery or Batteries in place.



- The batteries will mount in the nose of the Bandit EVO as shown on the battery tray.



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Center of Gravity

- Measure aft of the LE at the wing fuse joint 8.75.”

OPTION: Install a #2 button head screw a 1/4” inward at the aft side of the tape on each side of the fuselage.



Balance the model fully assembled, with all batteries in and gear down.

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Control Surface Deflections and Expo Settings

NOTE: The BVM Demo plane is set up using the following Expo percentages. Positive values are used on Spektrum and JR radios, Futaba uses negative.

Control	High Rate Travels		Expo	D/R M	D/R L
Stab (measured at the fuse side.)	Up 1.25"	Down 1.0"	25	80%/25	50%/20
Aileron (measured at the Flap)	3/4"	3/4"	25	80%/25	50%/20
Flaps (measured at the Root)	Take Off 3/4"	Landing 2-1/4"			
Rudder (measured at the Bot.)	L&R 1"		25	80%/25	50%/20

Connecting RX wires

The wires are labeled from the factory. If you are using the DX18, the program is available from BVM. Follow the chart below to connect the servos.

DX18 Connection Chart						
RX Port	(1)Throttle	(2)Aileron	(3)Elevator	(4)Rudder	(5)Gear	(6)Aux1
Surface	Throttle	Right Ail	Right Elev	Rudder	Left Flap	Left Ail
RX Port	(7)Aux2	(8)Aux3	(9)Aux4	(10)Aux5	(11)Aux6	(12)Aux7
Surface	Right Flap	Gear	Left Elev	Brake	Nose Steering	Gyro

DX20,DX18, and DX18QQ Transmitter File

The BVM Demo models are setup on Spektrum DX20 transmitters. The file, if requested, has all the mixes, rates, expos, and settings done for you. Setting the sub trim, switches, and travel adjustment must be accomplished by the modeler for the specific aircraft.

Important!!! Check the directions of all flight controls before each flight.

Switch/Lever/Trimmer	Channel	Output
Switch A	(8)Aux 3 Gear	Landing Gear, Down is Down
Switch D (Flight Modes)	Flaps	Up is Normal flight Mid Take Off Down is Landing
Switch E	Brakes	Pos 0-off, Pos 1-pulse, Pos 2-stop
L. Trim	Steering Trim/(11)Aux 6	Down for Right Steering Trim Up for Left Steering Trim
Switch F	Aileron Rates	Up (0) is High
Switch G	Gyro	Pos 0- off, Pos 1- low, Pos 2- high
Switch A	Timer	

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First Flight Profile

Make the first flight with the gyro “off”. See also BVM article “Gyro Sense”.

Flight Time

The BVM demo model’s transmitter timer is set for 6 minutes. On the first flight, land a couple minutes early to check battery consumption. Adjust the flight timer accordingly.

Taxi Test/Engine Run Up

A taxi test should include a radio range check with the engine running at various power levels. Check that the wheel brakes are adequate and the stopping action is without skidding or pulling left or right.

Takeoff

Begin the takeoff roll by slowly advancing the throttle. Maintain runway center while holding about 1/2 stick up elevator; the Bandit Evo will rotate when it is ready. If there is a cross wind, hold a small amount of aileron into the wind, be prepared with opposite rudder.

Trim

Once in the air, find a medium cruise speed to set the trims. The aircraft should fly straight and level “hands off”. When the landing gear come down, a few clicks of trim may be needed. This can be mixed in, or use flight modes to trim automatically.

Landing

The landing is like most jets, “power on” during the approach. The Bandit Evo does not stall easily, it is best to land nose high, touching on the main wheels first.

The majority of the first flight should be spent trimming and practicing for the first landing. Save the aerobatics and air show stuff for later flights.

RX Battery Consumption

The average flight consumes 300 mAh. We recommend two flights and recharge. Use this data to calculate how many flights you can achieve from your system.

BVM is synonymous with “Success Jets.” It is very important to us that you are successful with our products. This extensive manual reflects our sincerity. As always, your comments and suggestions on BVM products are appreciated.

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