SebArt *professional line*

MC-72 50E ARF scale

ASSEMBLY MANUAL

The real plane

The Macchi Castoldi MC-72 flew to become the fastest propeller driven ***sea plane*** ever on October 23, 1933, with the still standing record speed of 709.2 km/h (440.68 mph.)
In 1928 Macchi Aeronautica start work with G. Diliberto and M. Castoldi on the Macchi Castoldi MC-72, at that date the most revolutionary project for a Schneider Cup racer and world record achiever.
The MC-72 incorporated a twin engine design, two Fiat V-12 engines linked together one behind the other, powering two counter-rotating propellers. An arrangement that worked surprisingly well, because this design advantage is that counter-rotating propellers balance the effects of torque, making easier the control of the plane in every flight condition.
The aircraft could be a hand full for novice pilots and more experienced pilots praised the MC-72 for its speed, responsiveness, and directional stability.
The Macchi Castoldi MC-72 remains a winner to this date.

Specifications:

Year Built: 1931
Primary Function: racer
Length: 8,32 m (27' 4")
Wingspan: 9,48 m (31' 10")
Weight Empty: 2.500 kg (5,512 lbs.)
Max. Speed: 709 km/h (440 mph)
Engine: 2 x Fiat AS.6 V-12
Horsepower: 2,850 hp

The model

The ***MC-72 50E*** *ARF scale,* was designed by the 13 times Italian Champion Sebastiano Silvestri, vice-European Champion and F.A.I World Cup winner F3A.

This professional ARF kit is the result of Sebastiano's long research, experience in F3A and his passion for scale planes. This combined with an extremely light weight structure and with many small aerodinamical tricks give the ***MC-72 50E*** an impressive precision and easy control at any airspeed and flight condition.

The ***MC-72 50E*** can do it all… it can start and land very easy on water as on ground with grass surface, thanks to the small wheels on floater's bottom. It is ready for any pattern manouvers as for unbelievable easy knifeedge flights, loops, rolling circles, negative flat spins... and almost anything else you can dream up from a sea plane are waiting you!

.....the only aerobatic-fun limit is your fantasy!

Specifications:

Wing Span:……..…….....152 cm
Length:…….....…….....…140 cm
Wing Area:…….....40 dm2
Weight:…….....2.900g. RTF less battery
Radio:.....5-Channel with 2 standard + 2 low profile servos

Recommended power set up:

Motor:..... Hacker A50-14S
ESC:…….....Hacker Master Basic 70 SB

Propeller: ….....…….....APC 16x8E
Battery: ….....…4000-5S or 4500-5S

Required radio, motor and battery

Radio equipment:
- Minimum 5-channel radio system
- 2 standard + 2 low profile servos (JR PROPO DS8301 and DS9511)
- 2 servo extension 100mm, for aileron's servos

Recommended electric motor for best performance:
- Hacker A50-14S + X70 SBec-Pro controller + APC 16x8E

Recommended Li-Po battery pack for best performance:
- 4000mAh 5S or 4500mAh 5S

Additional required item, tools and adhesives

Tools:
- Drill
- Drill bits: 1,5mm
- Phillips screwdriver
- Hobby knife
- Sanding paper
- Masking tape
- Soldering iron

Adhesives:
- thin CA
- medium CA
- silicon

Warning

This RC aircraft is not a toy!

If misused, it can cause serius bodily harm and damage to property. Fly only in open areas, preferably in official flying sites, following all instructions included with your radio and motor.

Before starting assembly

Before starting the assebly, remove each part from its bag and protection for a prior inspection. Closely inspect the fuselage, wing panels, rudder, and stabilizer for damage. If you find any damage or missing parts, contact the place of purchase.
If you find any wrinkles in the covering, use a heat gun or covering iron to remove them. Use caution while working around areas where the covering material overlap to prevent separating the covers.

Warranty information

SebArt garantees this kit to be free from defects in both material and workmanship at the date of purchase.
This warranty does not cover any parts damage by use or modification, and in no case shall SebArt's liability exceed the original cost of the purchased kit.
Further, SebArt reserve the right to change or modify this warranty without notice. In that SebArt has no control over the final assembly or material used for the final assembly, no liability shall be assumed or accepted for any damage of the final user-assembled product. By the act of using the product, the user accepts all resulting liability.
If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

Control throws

Please, follow carefully the recommended linkage setups:

- **For the AILERON** we recommend the following throws:

High rate: 30° left & right
Normal flight: D/R: 40% Expo: 40%

Snap, knife edge loop: D/R: 80% Expo: 60%
Start, spin, landing: D/R: 100% Expo: 70%

- **For the ELEVATOR** we recommend the following throws:

High rate: 30° up & down
Normal flight: D/R: 40% Expo: 50%
Snap, knife edge loop: D/R: 40% Expo: 50%
Start, spin, landing: D/R: 100% Expo:75%

- **For the RUDDER** we recommend the following throws:

High rate: 30° left & right
Normal flight: D/R: 60% Expo: 20%
Snap, knife edge loop: D/R: 80% Expo: 30%
Start, spin, landing: D/R: 100% Expo: 50%

Note: the Expo is (+) for JR systems, and (–) for Futaba systems.

Mixing

We recommend the following mix (if you have a programmable computer radio):

- ***Rudder →Elevator UP***

full rudder to the right, the elevator have to go up (positive) approx. 24%
full rudder to the left, the elevator have to go up (positive) approx. 12%

- ***Rudder → Ailerons***

full rudder to right the ailerons need to go right 4%
full rudder to left the ailerons need to go left 5%

- ***Use 10% aileron differential (more up)***

Recommended Center of Gravity

The recommended CG is **85mm** behind the leading edge of wing.

Pre-flight

Never attempt to make full throttle dives! This model have to be flown like a full-scale airplane. If the airframe goes too fast, such as in a high throttle dive, it may fail. Throttle management is absolutely necessary.

Range test your radio

- ✓ Before fly, be sure to range check your radio as manufacturer's instruction manual of you radio-system recommend.
- ✓ Double-check all controls (aileron, elevator, rudder and throttle) move in the correct direction.
- ✓ Be sure that your motor battery pack is fully charged, as per the instructions included with your batteries and that your radio is fully charged as per its instructions.

Finally... have nice flights!

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