

# **SV3 USER MANUAL**

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MARINE ROBOTICS SOCIETY GLASGOW

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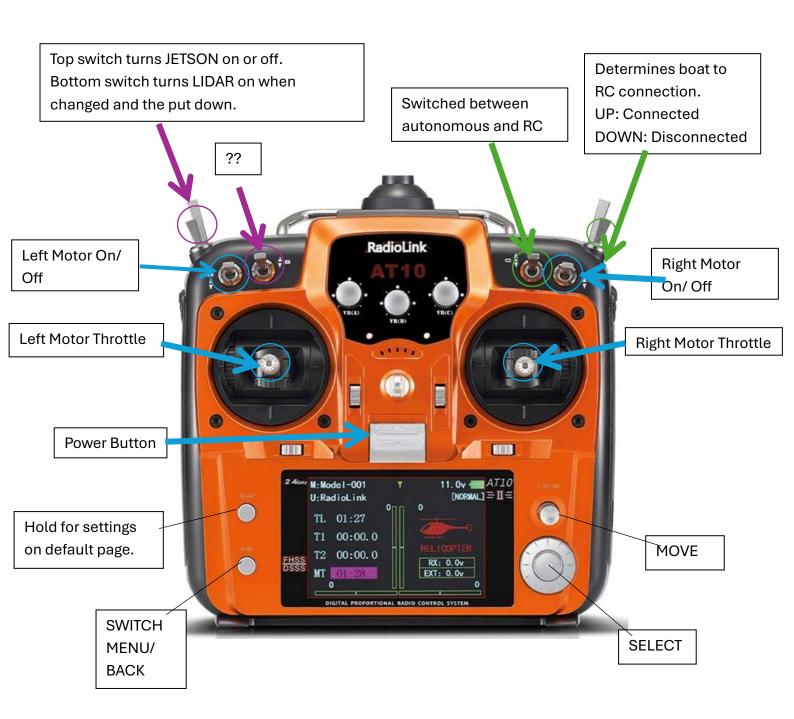
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### Introduction

This document is intended to be read by all members of MRS. It covers how to set things up and gives a brief explanation of some parts.

(PIC)

### **RC** Controller



#### **Additional Notes**

#### Powering up sequence

- 1. Power button
- 2. Wiggle both throttles until warning is killed on RC
- 3. C medium (Direct control)
- 4. A and D up to engage motors
- 5. If motor not engaging, wiggle the throttles to turn them on.
- 6. Test both throttles to ensure direct control is on.
- 7. IF we are not in direct control, switch G to opposite position G toggles between Arduino mode and direct mode.

#### Autonomy sequence

- 1. Perform power up sequence
- 2. Toggle G to Arduino mode
- 3. Move C up to engage autonomy.

#### Killswitch

1. Put C down, wait a second. Red means Killswitch and flashing amber means lost connection to RC.

#### Power Down Sequence

- 1. C to medium (direct control)
- 2. Ensure direct control by wiggling throttles and checking motor connection.
- 3. IF not, toggle G.
- 4. Disengage motors by putting A and D down.
- 5. Turn the RC off.

## Traffic Light Messages

### Key:

- × This colour is **not** displayed
- √ This colour is displayed
- \* This colour is **flashing**

| Message                                            | Colour |          |          |  |
|----------------------------------------------------|--------|----------|----------|--|
| _                                                  | RED    | AMBER    | GREEN    |  |
| Killswitch                                         | ✓      | ×        | *        |  |
| RC Control                                         | *      | <b>✓</b> | *        |  |
| Autonomy Active                                    | *      | *        | <b>√</b> |  |
| RC Control,<br>Autonomy Active                     | *      | ✓        | <b>✓</b> |  |
| Motors disengaged,<br>RC connected                 | ✓      | ✓        | *        |  |
| Killswitch, RC<br>Connected but not<br>in control. | ✓      | *        | ×        |  |

(Summary or something)

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## **Exterior Electronics**

| (Lots of pictures)                    |
|---------------------------------------|
| Motors                                |
| (How to hook them up, where they are) |
| Displays                              |
| (which is which and why it matters)   |
|                                       |
| 4G Radio                              |
| (What it does)                        |
|                                       |
| Emergency Button                      |
|                                       |
| A so which we also                    |
| Anything else                         |

## **Multifunction Buttons**

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## Using The Battery

(How to charge SV3, understanding the display).