**MATSYA 3-4**

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| **NAMES**  1.Single Board Computer (SBC)  2.General Purpose Input Output (GPIO) board  3. Hydrophones  4. Batteries  5. Pressure Sensor | **CHANGES**  Due to improvements in software and acoustic systems, SBC in M4 is upgraded. M4 has an improved processor and also its RAM got increased from 4GB to 8GB.  This is a new addition in M4 along with  BeagleBone Black board. It works in connection with the SBC. It has many functions such as it makes easier to add any new sensor or subsystem to the board. It has improved modularity of the system. It executes closed loop control algorithms to provide required PWMs to thrusters.  ALU of M4 uses 4 hydrophones instead of 2 used in M3.  There are changes in the battery system-   1. In M3 there were 3 4-cell 14.8 V batteries. 1 5.4 Ah and 2 6.8Ah batteries. But in M4 there are 2 5-cell 18.5V batteries. Both are 16 Ah. 2. Endurance of the vehicle has also increased from 1.5 hours to 6 hours.   Operating pressure range has been decreased from 500 PSI to 100 PSI. |

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