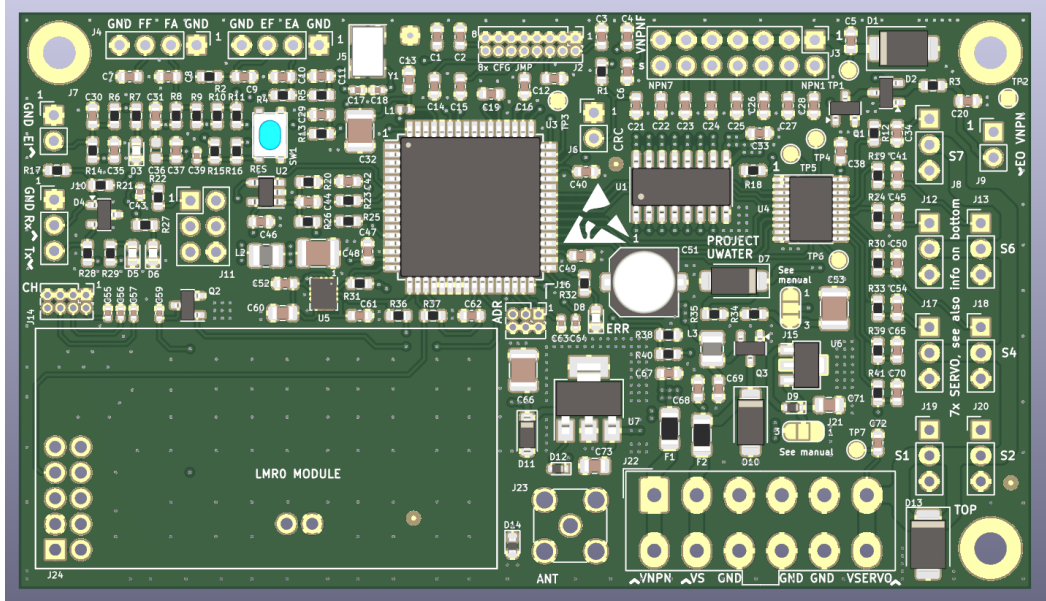


Flyer 27MHz receiver for remote control of a model submarine without telemetry

Receiver based on the Radiometrix LMRO module with digital outputs

Vessel, supports multiple buoyancy systems

3x electrical isolated mounting hole that can be connected to GND via solder jumper on back.	FA/FF EA/EF Piston tank end-limits (active low) FA=Full After FF=Full Forward EA=Empty After EF=Empty Forward	CFG 8-1 = Configuration 1=Enable reverse thrust 2 =X-rudder ¹ (uses also free 1) 3=Low battery guard VS 4=Low battery guard VS 5=Low battery guard VS 6=Empty tanks direct on no RF 7=Two propellers ² (uses also free 1) 8=Invert reverse thrust	7x Digital outputs ³ 24V/0.3A/NPN (active low) For instance: - Valves - Pumps - Lights - Sounds - Torpedo's	Configuration (CFG 543) 000= Low battery guard VS off 001=5.75V (6.00V, 3 cells, Lead acid) 010=6.90V (7.20V, 6 cells, NiMH/NiCD) 011=6.60V (7.40V, 2 cells, Lithium/LiPo) 100=8.05V (8.40V, 7 cells, NiMH/NiCD) 101=9.20V (9.60V, 8 cells, NiMH/NiCD) 110=9.90V (11.1V, 3 cells, Lithium/LiPo) 111=10.5V (12.0V, 6 cells, Lead acid)	
EI = Error input (active low). Response time=2s					EO ⁴ = 6-24V/0.3A error output (buoy release)
Rx not used. Tx used for printing receiver information.					7x 1-2ms servo pulse (3V3). Low pass output filter 7=aftPiston 6= Propeller 5=fwdPiston 4=Free 2 3=Free 1 ⁵ 2=Dive rudder 1=Left/right
Selectable servo pulse voltage via solder jumper at bottom side of PCB. (3.3 or 5.0V)	LEDs GRN = Power on indicator BLUE = Auto ranging successful YEL = Errors (low batt, no RF, EI) RED = Data receive	CH3-CH0 RF channel (0-5). Must match transmitter. X000=CH0=26.995MHz X001=CH1=27.045MHz X010=CH2=27.095 MHz X011=CH3=27.145 MHz X100=CH4=27.195 MHz X101=CH5=27.255 MHz	ADR2-ADR0 Protocol address (0-3). Must match transmitter. X00=ADR0 X01=ADR1 X10=ADR2 X11=ADR3	Supply voltages: VNPN: 6-24V (3A, slow blow fuse) VS: 6-12V (0.5A, slow blow fuse, low battery guard applicable) VSERVO: 6-24V (max 8A, non-fused)	
Outer PCB dimension: 57x100mm Mounting holes: 3x3.2mm, centre=48x94mm, 4.5mm from edge of PCB. Non-fatal error ⁶ : for instance RF signal loss, results in propeller and pistons to halt until RF signal is restored. Fatal errors ⁷ : a low battery and/or an active EI input causes the vessel to surface after which further diving is prohibited (reset required). Error input (EI): Supports open collector/NPN and normally open switches (active low). Signals can be paralleled.					

¹ Cannot be used together with two propellers.

² Cannot be used together with X-rudder.

³ A buoyancy system with low pressure elastic tanks and pumps & valves uses 4 digital outputs.

⁴ Activates after EI is uninterrupted active for 20s

⁵ Is used with two propellers or X-rudder.

⁶ Non-fatal error: piston tanks start emptying after 20s. It is a configuration option for the piston tank(s) to start emptying right away.

⁷ Fatal error: direction rudder (L/R) and propeller remains controllable.