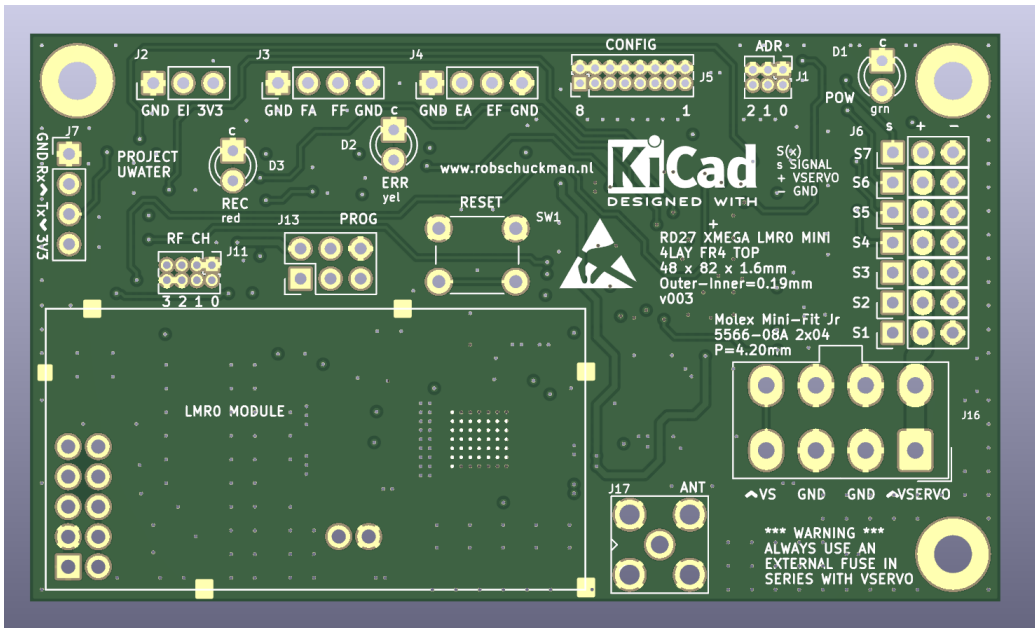


Flyer 27MHz mini receiver for remote control purposes of a model submarine (based on Radiometrix LMRO module)

Without auxiliary PCB, without digital outputs (ULN2003/7xNPN)

Supports piston tanks only

EI = Error input (active low).	FA/FF EA/EF	LEDs Grn = Power on indicator Yel = Errors (low batt., no RF, EI) Red = Data receive	CFG 8-1 = Configuration 1=Enable reverse thrust 2 =X-rudder ¹ (also uses 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 (also uses free 1) 8=Invert reverse thrust	ADR 2-1-0 Protocol address (0-3). Must match transmitter.	Limitations
Response time=2s	Piston tank end-limits (active low)				No digital outputs (ULN2003/NPN)
3V3 (10mA) available for interface electronics.	FA=Full After FF=Full Forward EA=Empty After EF=Empty Forw.			000=ADR0 001=ADR1 010=ADR2 011=ADR3	No error output (EO)
Rx used for auxiliary PCB					7x 1-2ms servo pulse (3V3).
Tx used for printing receiver information					Low pass output filter (220 Ohm/1nF).
Radiometrix LMRO module					7=aftPiston 6= Propeller 5=fwdPiston 4=Free 2 3=Free 1 ³ 2=Dive rud. 1=Left/right
Bottom side fitted with SMD components	RF 3-2-1-0 RF channel (0-5). Must match transmitter. 0000=CH0= 6.995MHz 0001=CH1=27.045MHz 0010=CH2=27.095 MHz 0011=CH3=27.145 MHz 0100=CH4=27.195 MHz 0101=CH5=27.255 MHz	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)	VS: 6-12V (fused) VSERVO: 6-24V (non-fused) VSERVO: supports high current (8A max continuously) VS: low battery guard applicable.	3x electrical isolated mounting hole One mounting hole can be connected to GND via solder jumper on bottom side.	
Outer PCB dimension: 48x82mm Mounting holes: 3x3.2mm, 4mm from edge of PCB Non-fatal error ⁴ : RF signal loss results in propeller and pistons to halt until RF signal is restored. Fatal errors ⁵ : 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): water detector and/or max depth. Supports open collector/NPN and normally open switches (active low). Signals can be paralleled. Limitations: does not support digital outputs (ULN2003/NPN), does not support error output (EO, buoy release), supports buoyancy system with piston tanks only.					

¹ Cannot be used together with two propellers.

² Cannot be used together with X-rudder.

³ Is used with two propellers or X-rudder.

⁴ Changes to a fatal error after 20s of uninterrupted RF signal loss.

⁵ Direction rudder (L/R) and propeller remains controllable.