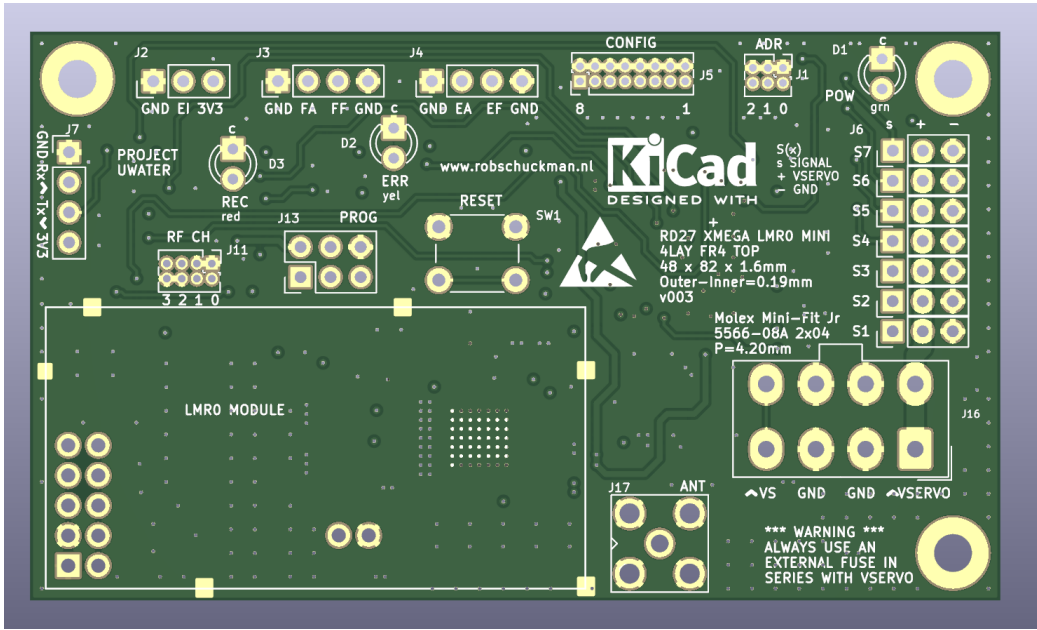


Flyer 27MHz mini receiver for simplex remote control of a model submarine

Supports piston tanks only, without digital outputs (no ULN2003)

Based on the Radiometric LMRO module

EI = Error input (active low). Response time=2s 3V3 (10mA) available for interface electronics.	FA/FF EA/EF Piston tank end-limits (active low) FA=Full After FF=Full Forward EA=Empty After EF=Empty Forw.	LEDs GRN = Power on indicator YEL = Errors RED = Data receive	CFG 8-1 = Configuration 1=Enable reverse thrust 2 =X-rudder¹ (also uses free 2) 3=Low battery guard VS 4=Low battery guard VS 5=Low battery guard VS 6=Empty tanks direct on non-fatal error 7=Two propellers² (also uses free 2) 8=Invert reverse thrust	ADR 2-1-0 Protocol address (0-3). Must match transmitter. 000=ADRO 001=ADR1 010=ADR2 011=ADR3	Software ID: rd27_mini_xm_lmr0
Rx & Tx used for auxiliary³ PCB Automatically detects presence of auxiliary PCB.					7x 1-2ms servo pulse (3V3). Low pass output filter (220 Ohm/ 1nF). 7=aftPiston 6= Propeller 5=fwdPiston 4=Free 2⁴ 3=Free 1 2=Dive rudder 1=Left/right
Radiometrix LMRO module on top and SMD components on bottom.	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)	Supply voltages: VS: 6-12V (0.5A fuse, slow blow, low battery guard applicable) VSERVO: 6-24V (max 8A, non-fused)	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 error⁵: causes the propeller and pistons tanks to halt until the cause is resolved. After 20s piston tanks start emptying. Stops when the cause is resolved. Fatal errors⁶: causes the vessel to surface after which further diving is prohibited (reset required). Direction rudder (L/R) and propeller remain controllable. 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 Note the auxiliary PCB can also generate errors.

⁴ Is used with two propellers or X-rudder.

⁵ Non-fatal errors: RF signal loss and max depth (auxiliary PCB)

⁶ Fatal errors: low battery, error input (EI) and water leakage (auxiliary PCB).