



RM

Costruzioni Elettroniche

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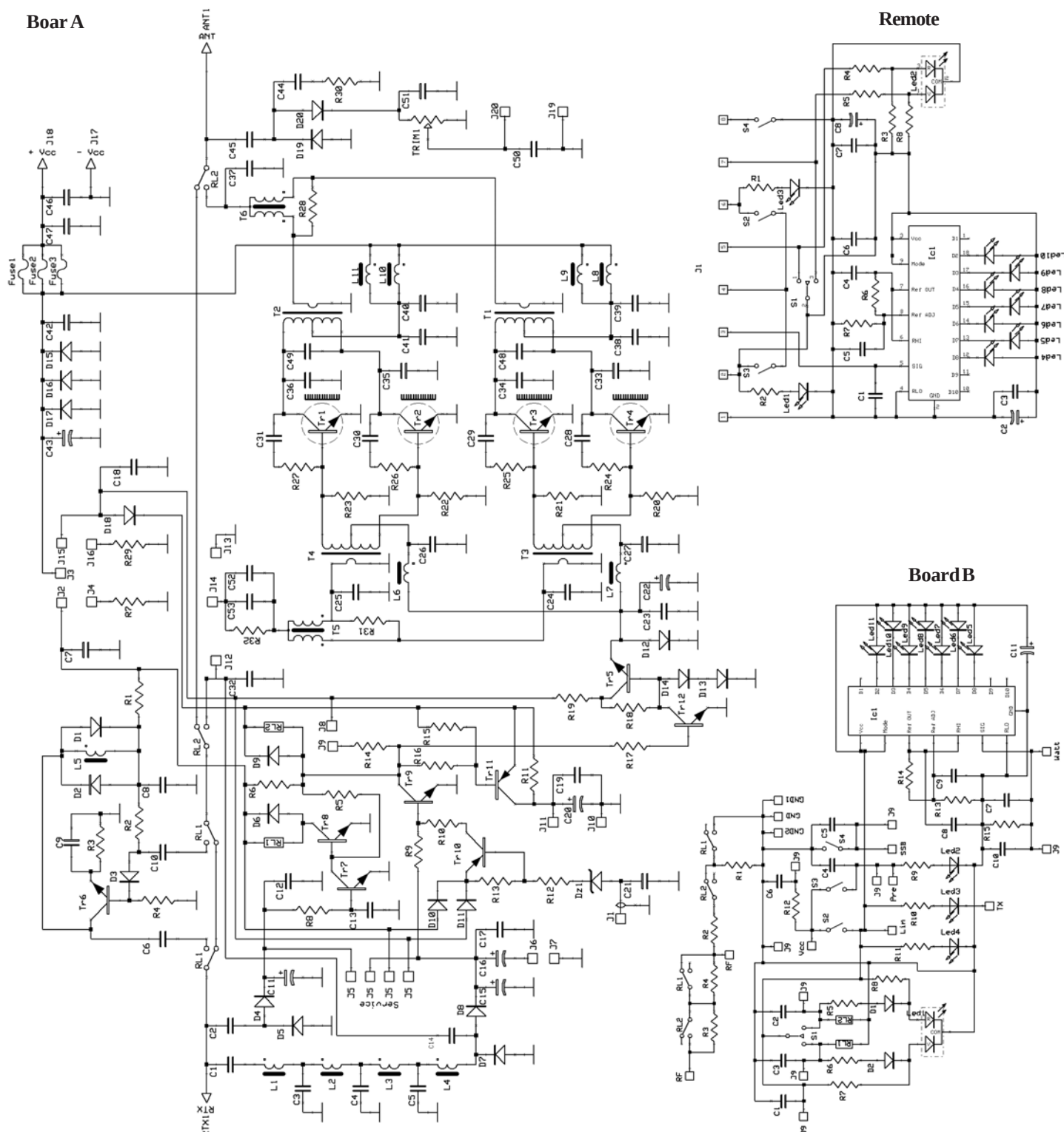
E-MAIL ufftec@rmitaly.com

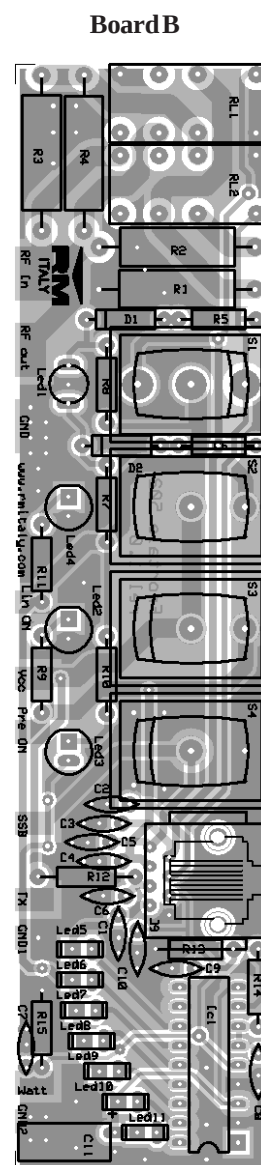
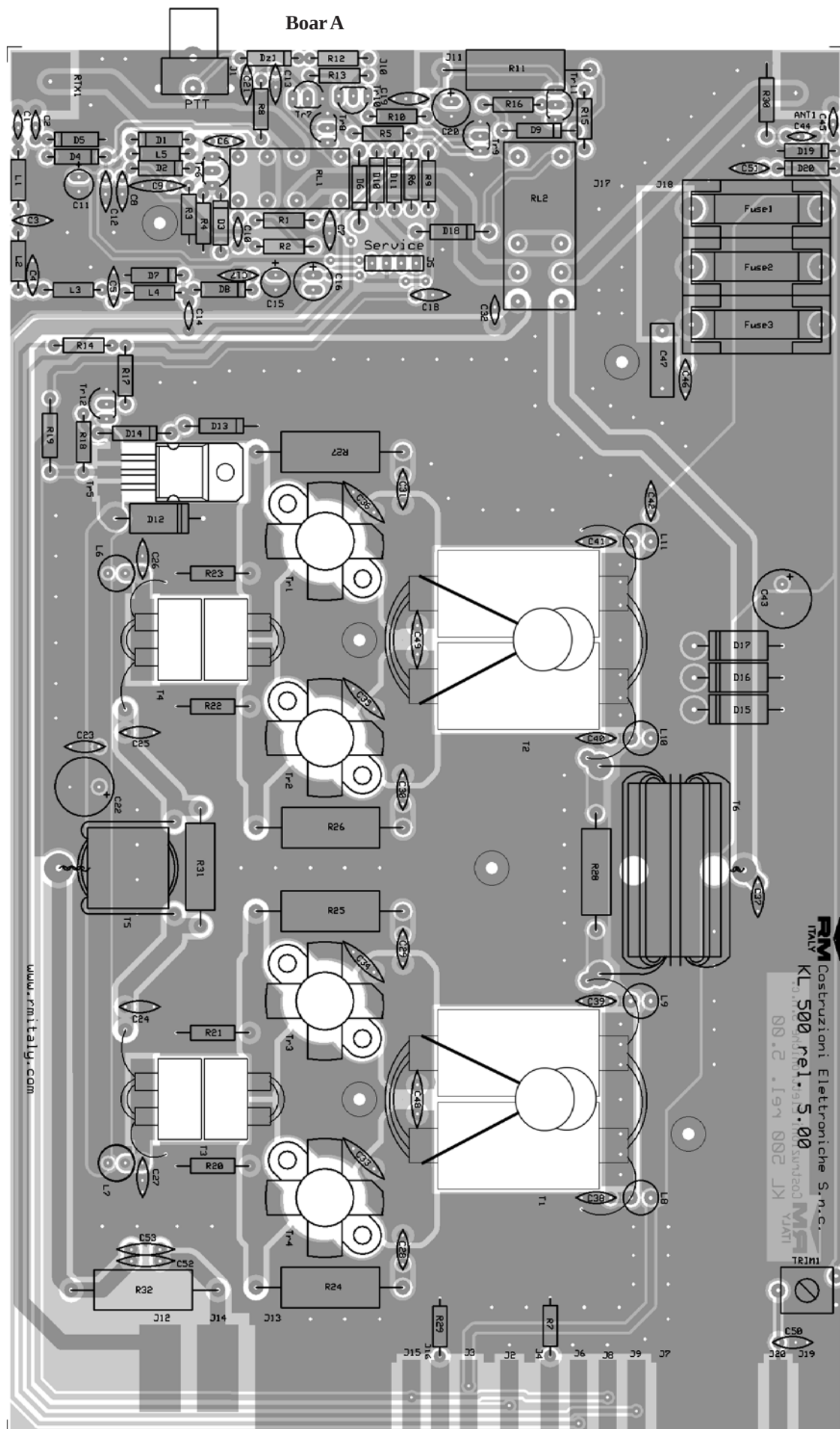
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Mod. KL 501 linear amplifier

Schematic diagram

Version 5.01





List of components board A

C ₁ = 3.3 pF	50 V	NP0	C ₄₈ = 750 pF	500 V	Mica
C ₂ = 8.2 pF	50 V	NP0	C ₄₉ = 750 pF	500 V	Mica
C ₃ = 100 pF	50 V	NP0	C ₅₀ = 10 nF	50 V	
C ₄ = 100 pF	50 V	NP0	C ₅₁ = 100 nF	50 V	
C ₅ = 82 pF	50 V	NP0	C ₅₂ = 180 pF	500 V	N750
C ₆ = 150 pF	50 V	NP0	C ₅₃ = 180 pF	500 V	N750
C ₇ = 10 nF	50 V		R ₁ = 100 Ω	¼W	
C ₈ = 10 nF	50 V		R ₂ = 12 KΩ	¼W	
C ₉ = 470 pF	50 V	N750	R ₃ = 100 Ω	¼W	
C ₁₀ = 56 pF	50 V	NP0	R ₄ = 2.2 KΩ	¼W	
C ₁₁ = 10 µF	16 V		R ₅ = 12 KΩ	¼W	
C ₁₂ = 10 nF	50 V		R ₆ = 4.7 KΩ	¼W	
C ₁₃ = 10 nF	50 V		R ₇ = 1.0 KΩ	¼W	
C ₁₄ = 5.6 pF	50 V	NP0	R ₈ = 2.2 KΩ	¼W	
C ₁₅ = 2.2 µF	16 V		R ₉ = 2.2 KΩ	¼W	
C ₁₆ = 47 µF	16 V		R ₁₀ = 2.2 KΩ	¼W	
C ₁₇ = 10 nF	50 V		R ₁₁ = 47 Ω	5W	
C ₁₈ = 10 nF	50 V		R ₁₂ = 12 KΩ	¼W	
C ₁₉ = 10 nF	50 V		R ₁₃ = 2.2 KΩ	¼W	
C ₂₀ = 10 µF	16 V		R ₁₄ = 1.0 KΩ	¼W	
C ₂₁ = 10 nF	50 V		R ₁₅ = 1.0 KΩ	¼W	
C ₂₂ = 470 µF	25 V		R ₁₆ = 4.7 KΩ	¼W	
C ₂₃ = 100 nF	50 V		R ₁₇ = 12 KΩ	¼W	
C ₂₄ = 220 pF	50 V	NP0	R ₁₈ = 820 Ω	¼W	
C ₂₅ = 220 pF	50 V	NP0	R ₁₉ = 1.0 Ω	½W	
C ₂₆ = 10 nF	50 V		R ₂₀ = 10 Ω	½W	
C ₂₇ = 10 nF	50 V		R ₂₁ = 10 Ω	½W	
C ₂₈ = 47 nF	50 V		R ₂₂ = 10 Ω	½W	
C ₂₉ = 47 nF	50 V		R ₂₃ = 10 Ω	½W	
C ₃₀ = 47 nF	50 V		R ₂₄ = 68 Ω	2W	
C ₃₁ = 47 nF	50 V		R ₂₅ = 68 Ω	2W	
C ₃₂ = 47 pF	50 V		R ₂₆ = 68 Ω	2W	
C ₃₃ = 180 pF	500 V	N750	R ₂₇ = 68 Ω	2W	
C ₃₄ = 180 pF	500 V	N750	R ₂₈ = 100 Ω	2W	
C ₃₅ = 180 pF	500 V	N750	R ₂₉ = 1.0 KΩ	¼W	
C ₃₆ = 180 pF	500 V	N750	R ₃₀ = 27 Ω	½W	
C ₃₇ = 68 pF	500 V	NP0	R ₃₁ = 100 Ω	2W	
C ₃₈ = 100 nF	50 V		R ₃₂ = 33 Ω	5W	
C ₃₉ = 100 nF	50 V		TRIM ₁ = 10 KΩ		
C ₄₀ = 100 nF	50 V		D ₁ = D ₂ = D ₃ = D ₄ = D ₅ = D ₇ = D ₈ = 1N4148		
C ₄₁ = 100 nF	50 V		D ₁₀ = D ₁₁ = D ₁₉ = D ₂₀ = 1N4148		
C ₄₂ = 100 nF	50 V		D ₆ = D ₉ = D ₁₃ = D ₁₄ = D ₁₈ = 1N4007		
C ₄₃ = 470 µF	25 V		D ₁₂ = D ₁₅ = D ₁₆ = D ₁₇ = 1N5400		
C ₄₄ = 33 pF	50 V	NP0	Dz ₁ = 5.1 V ½W		
C ₄₅ = 2,2 pF	50 V	NP0	Tr ₁ = Tr ₂ = Tr ₃ = Tr ₄ = MS 1051		
C ₄₆ = 100 nF	50 V		Tr ₅ = 2SD2012		
C ₄₇ = 470 nF	100 V	Polyester	Tr ₇ = Tr ₈ = Tr ₉ = BC 547		
			Tr ₁₀ = BC 557		
			Tr ₁₁ = BC 327		

$Tr_6 = BF 199$
 $L_1 = L_2 = L_3 = L_4 = 2,2 \mu H$
 $L_5 = 10 \mu H$
 $L_6 = L_7 = VK 200 \text{ 1 wire}$
 $L_8 = L_9 = L_{10} = L_{11} = VK 200 \text{ 2 wires}$
 $Rl_1 = Relè 12 V 3022$
 $Rl_2 = Relè 12 V 4052$
 $Fuse = 3 \times 12A$
 $T_3 = T_4 = T_5 = \text{Input transformers}$
 $T_1 = T_2 = T_6 = \text{Output transformers}$

List of components board B

$C_1 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_2 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_3 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_4 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_5 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_6 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_7 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_8 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_9 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_{10} = 10 \text{ nF} \quad 50 \text{ V}$
 $C_{11} = 22 \mu F \quad 16 \text{ V}$
 $R_1 = 100 \Omega \quad 2 \text{ W}$
 $R_2 = 68 \Omega \quad 2 \text{ W}$
 $R_3 = 27 \Omega \quad 2 \text{ W}$
 $R_4 = 10 \Omega \quad 2 \text{ W}$
 $R_5 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_6 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_7 = 8.2 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_8 = 10 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_9 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_{10} = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_{11} = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_{12} = 1.0 \Omega \quad \frac{1}{2} \text{ W}$
 $R_{13} = 8.2 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_{14} = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_{15} = 4.7 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $Ic_1 = LM 3915N$
 $Rl_1 = 30.22.0.012$
 $Rl_2 = 30.22.0.012$
 $Led_{1-11} = LED$
 $J_9 = RJ 45 \text{ Connector}$

List of components remote

$C_1 = 10 \text{ nF} \quad 50 \text{ V}$

$C_2 = 10 \mu F \quad 16 \text{ V}$
 $C_3 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_4 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_5 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_6 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_7 = 10 \text{ nF} \quad 50 \text{ V}$
 $C_8 = 10 \mu F \quad 16 \text{ V}$
 $R_1 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_2 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_3 = 10 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_4 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_5 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_6 = 1.0 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_7 = 8.2 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $R_8 = 8.2 \text{ K}\Omega \quad \frac{1}{4} \text{ W}$
 $Ic_1 = LM 3915N$
 $Led_{1-11} = LED$
 $J_1 = RJ 45 \text{ Connector}$