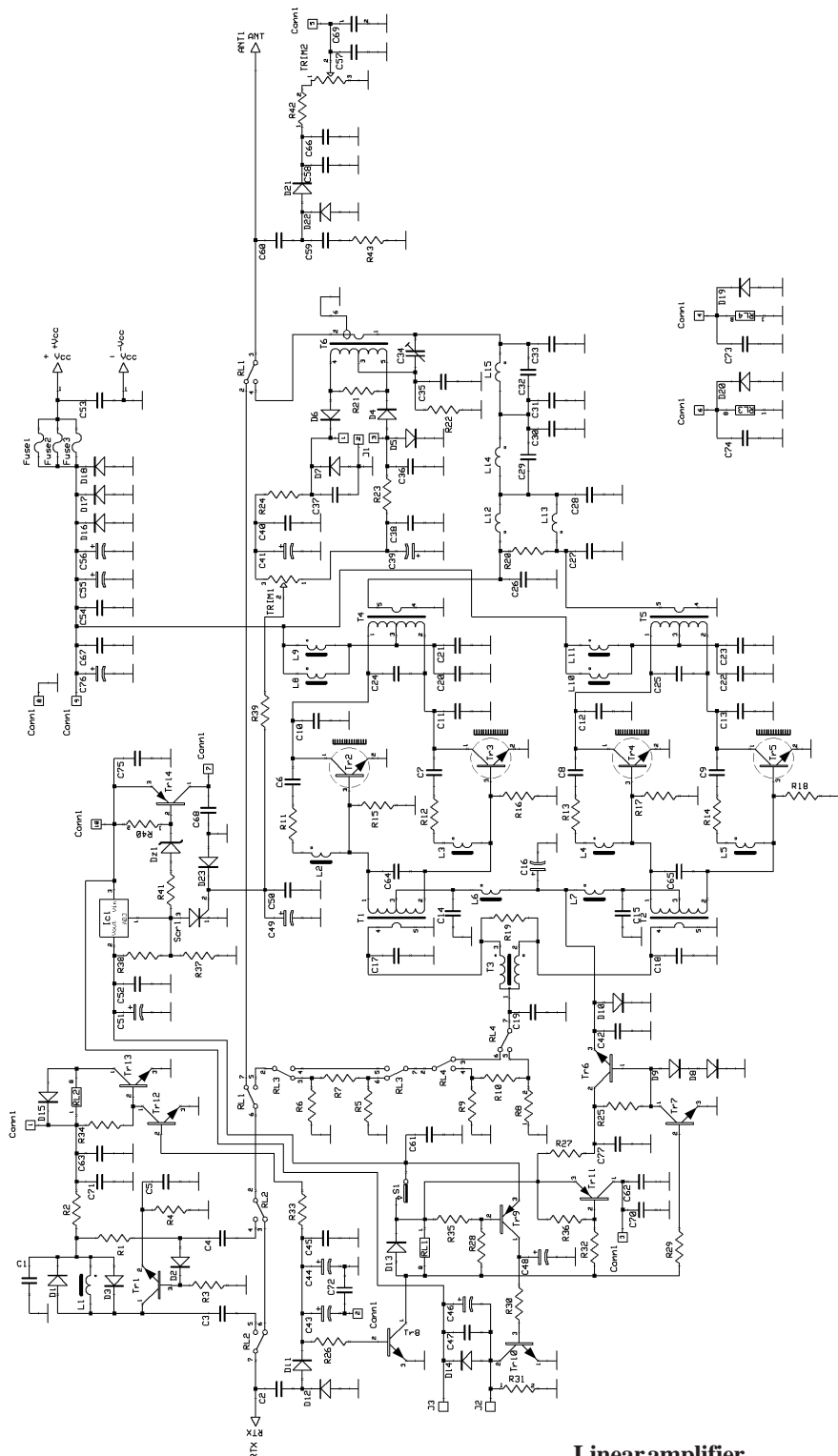




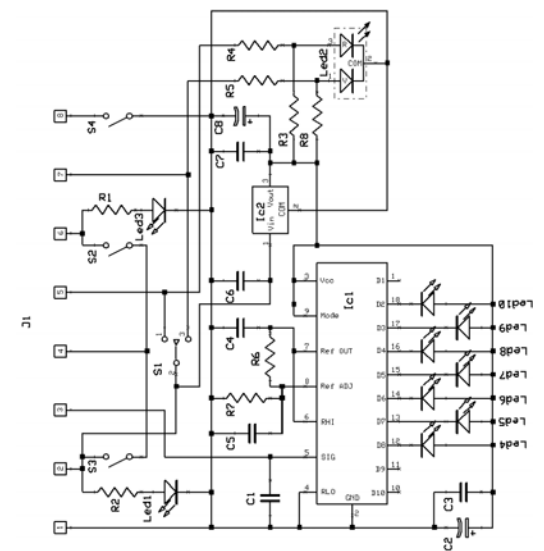
Mod. KL 800 linear amplifier

Schematic diagram

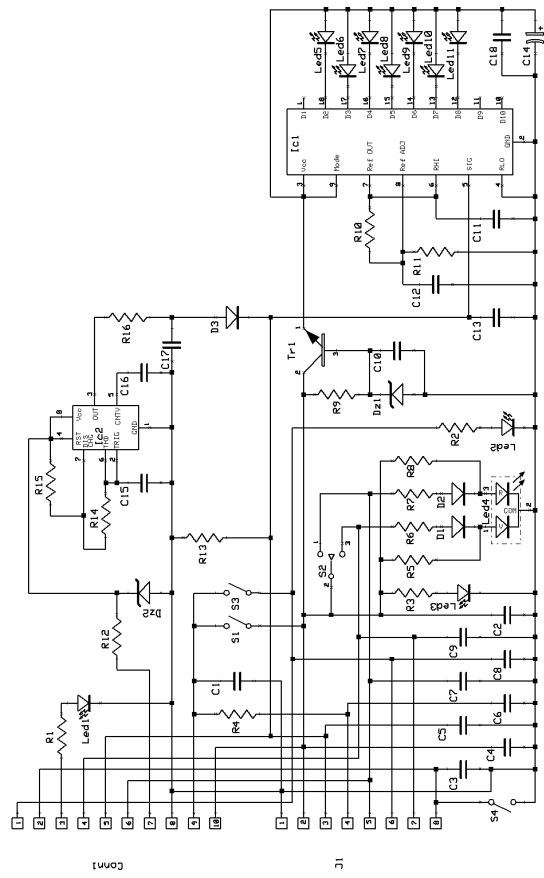
Version 1.00



Linear amplifier

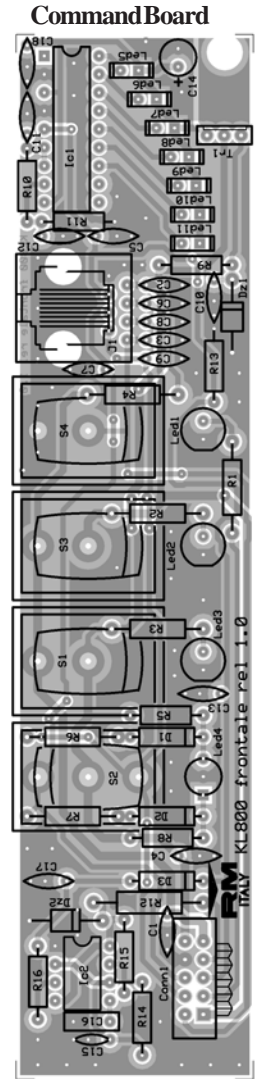
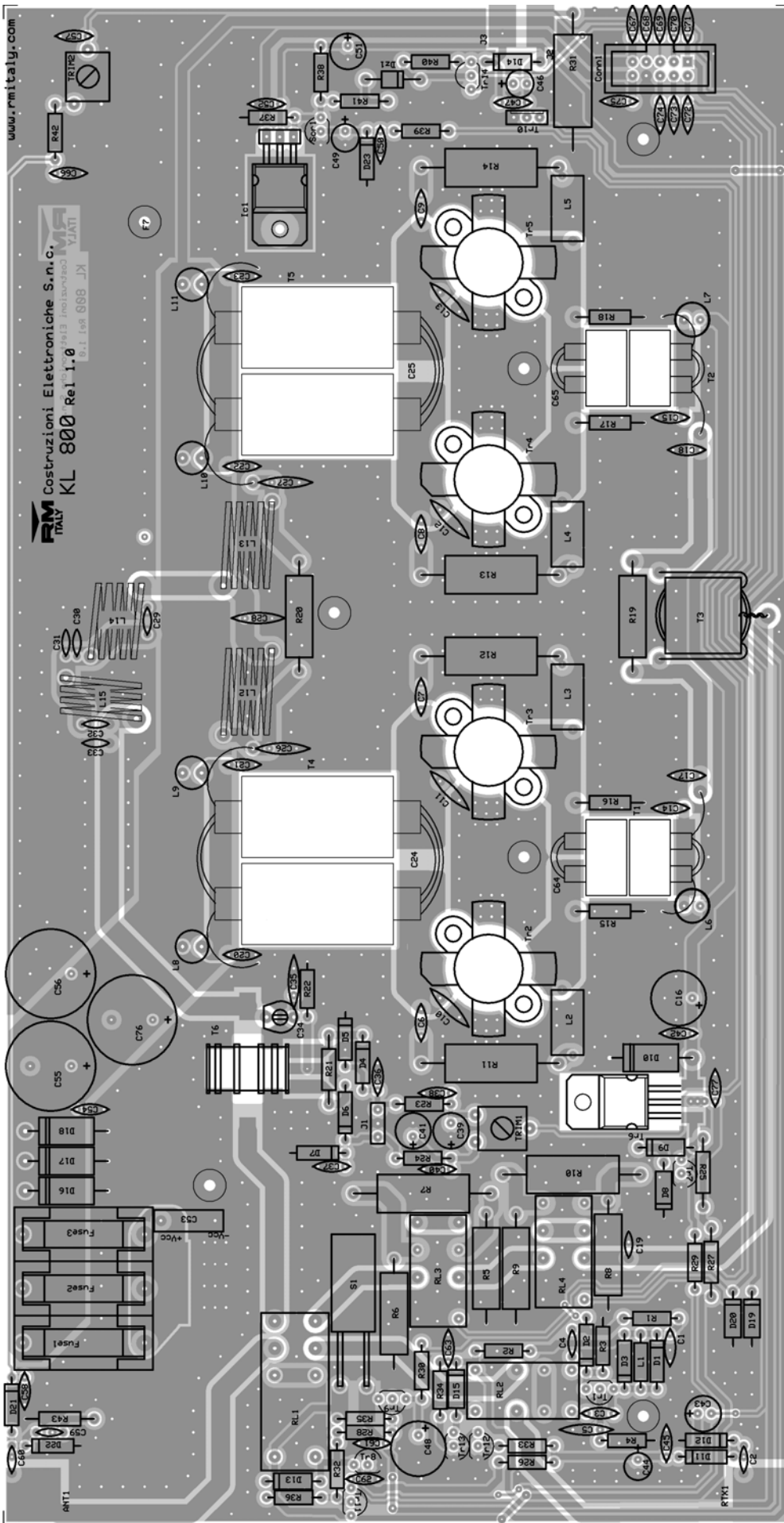


Remote control



Commandboard





List of components

- C 1 = 10 nF 50 V
- C 2 = 8,2 pF 50 V NP0
- C 3 = 150 pF 50 V NP0
- C 4 = 56 pF 50 V NP0
- C 5 = 470 pF 50 V N750
- da C 6 a C 9 = 47 nF 50 V
- da C 10 a C 13 = 220 pF 500 VN750
- C 14 = 100 nF 50 V
- C 15 = 100 nF 50 V
- C 16 = 470 µF 25 V
- C 17 = 220 pF 50 V NP0
- C 18 = 220 pF 50 V NP0
- C 19 = 27 pF 50 V NP0
- da C 20 a C 23 = 100 nF 50 V
- C 24 = not present
- C 25 = not present
- C 26 = 120 pF 500 V NP0
- C 27 = 120 pF 500 V NP0
- C 28 = 220 pF 500 V N750
- C 29 = 12 pF 500 V NP0
- C 30 = 82 pF 500 V NP0

C ₃₁ = 82 pF	500 V	NP0	R ₂₃ = 10 KΩ	¼W
C ₃₂ = 39 pF	500 V	NP0	R ₂₄ = 1,0 KΩ	¼W
C ₃₃ = 39 pF	500 V	NP0	R ₂₅ = 3,3 KΩ	½W
C ₃₄ = Trimmer 3 - 10 pF (white)			R ₂₆ = 4,7 KΩ	¼W
C ₃₅ = 470 pF	50 V	N750	R ₂₇ = 1,0 Ω	½W
da C ₃₆ a C ₃₈ = 100 nF	50 V		R ₂₈ = 47 KΩ	¼W
C ₃₉ = 33 μF	25 V		R ₂₉ = 47 KΩ	¼W
C ₄₀ = 100 nF	50 V		R ₃₀ = 4,7 KΩ	¼W
C ₄₁ = 33 μF	25 V		R ₃₁ = 68 Ω	5W
C ₄₂ = 100 nF	50 V		R ₃₂ = 47 KΩ	¼W
C ₄₃ = 33 μF	25 V		R ₃₃ = 4,7 KΩ	¼W
C ₄₄ = 4,7 μF	25 V		R ₃₄ = 22 KΩ	¼W
C ₄₅ = 100 nF	50 V		R ₃₅ = 10 KΩ	¼W
C ₄₆ = 10 μF	25 V		R ₃₆ = 47 KΩ	¼W
C ₄₇ = 100 nF	50 V		R ₃₇ = 15 KΩ	¼W
C ₄₈ = 1000 μF	25 V		R ₃₈ = 1,0 KΩ	¼W
C ₄₉ = 10 μF	25 V		R ₃₉ = 1,0 KΩ	¼W
C ₅₀ = 100 nF	50 V		R ₄₀ = 2,2 KΩ	¼W
C ₅₁ = 100 μF	35 V		R ₄₁ = 10 KΩ	¼W
C ₅₂ = 100 nF	50 V		R ₄₂ = 10 KΩ	¼W
C ₅₃ = 470 nF	100 V	Polyester	R ₄₃ = 27 Ω	½W
C ₅₄ = 100 nF	50 V		TRIM ₁ = PT10LV 10 KΩ	
C ₅₅ = 2200 μF	35 V		TRIM ₂ = PT10LV 220 KΩ	
C ₅₆ = 2200 μF	35 V		da D ₁ a D ₇ = 1N4148	
C ₅₇ = 100 nF	50 V		D ₈ = 1N4007	
C ₅₈ = 100 nF	50 V		D ₉ = 1N4007	
C ₅₉ = 33 pF	50 V	NP0	D ₁₀ = 1N5400	
C ₆₀ = 2,2 pF	50 V	NP0	D ₁₁ = 1N4148	
da C ₆₁ a C ₆₃ = 100 nF	50 V		D ₁₂ = 1N4148	
C ₆₄ = 2 x 470 pF	50V	N750	da D ₁₃ a D ₁₅ = 1N4007	
C ₆₅ = 2 x 470 pF	50V	N750	da D ₁₆ a D ₁₈ = 1N5400	
da C ₆₆ a C ₇₅ = 100 nF	50 V		D ₁₉ = 1N4007	
C ₇₆ = 2200 μF	35 V		D ₂₀ = 1N4007	
C ₇₇ = 100 nF	50 V		da D ₂₁ a D ₂₃ = 1N4148	
R ₁ = 12 KΩ	¼W		DZ ₁ = 20 V 1,3W	
R ₂ = 1,8 KΩ	¼W		Tr ₁ = BF 199	
R ₃ = 2,2 KΩ	¼W		da Tr ₂ a Tr ₅ = SD 1407	
R ₄ = 100 Ω	¼W		Tr ₆ = BD 241 BFP	
R ₅ = 470 Ω	2W		da Tr ₇ a Tr ₈ = BC 547B	
R ₆ = 470 Ω	2W		Tr ₉ = BC 557B	
R ₇ = 12 Ω	5W		Tr ₁₀ = BD 179	
R ₈ = 220 Ω	2W		Tr ₁₁ = BC 557B	
R ₉ = 220 Ω	2W		Tr ₁₂ = BC 547B	
R ₁₀ = 22 Ω	5W		Tr ₁₃ = BC 547B	
da R ₁₁ a R ₁₄ = 68 Ω	5W		Tr ₁₄ = BC 327-25	
da R ₁₅ a R ₁₈ = 10 Ω	½W		Scr ₁ = P0102	
R ₁₉ = 100 Ω	2W		Ic ₁ = LM 317T	
R ₂₀ = 100 Ω	2W		L ₁ = 10 μH	
R ₂₁ = 47 Ω	½W		da L ₂ a L ₅ = VK 200	
R ₂₂ = 1,0 KΩ	¼W			

$L_6 = \text{VK 200 1 wire}$
 $L_7 = \text{VK 200 1 wire}$
 $\text{da } L_8 \text{ a } L_{11} = \text{VK 200 2 wires}$
 $L_{12} = 6 \text{ turns on } \phi 14 \text{ mm wire } \phi 1,5 \text{ mm}$
 $L_{13} = 6 \text{ turns on } \phi 14 \text{ mm wire } \phi 1,5 \text{ mm}$
 $L_{14} = 6 \text{ turns on } \phi 11 \text{ mm wire } \phi 1,5 \text{ mm}$
 $L_{15} = 5 \text{ turns on } \phi 11 \text{ mm wire } \phi 1,5 \text{ mm}$
 $RI_1 = \text{Relè 24 V 4152.9.024}$
 $RI_2 = \text{Relè 24 V 3022.9.024}$
 $RI_3 = \text{Relè 24 V 3022.9.024}$
 $RI_4 = \text{Relè 24 V 3022.9.024}$
 $\text{Fuse}_1 = \text{Fuse}_2 = \text{Fuse}_3 = 10\text{A } 5 \times 20 \text{ Fast}$
 $T_1 = T_2 = \text{Input transformer}$
 $T_3 = \text{Input decoupler}$
 $T_4 = T_5 = \text{Output transformer}$
 $T_6 = \text{ANRA 700/12}$
 $S_1 = 80^\circ\text{C Thermostat}$
 $\text{Conn}_1 = \text{To Command Board}$
 $J_1 = \text{Service connector}$
 $J_2 = J_3 = \text{to Fan}$

Commnd Board

$C_1 = 10 \text{ nF } 50 \text{ V}$
 $C_2 = 100 \text{ nF } 50 \text{ V}$
 $C_3 = 100 \text{ nF } 50 \text{ V}$
 $C_4 = 10 \text{ nF } 50 \text{ V}$
 $C_5 = 10 \text{ nF } 50 \text{ V}$
 $C_6 = 100 \text{ nF } 50 \text{ V}$
 $C_7 = 100 \text{ nF } 50 \text{ V}$
 $C_8 = 100 \text{ nF } 50 \text{ V}$
 $C_9 = 100 \text{ nF } 50 \text{ V}$
 $C_{10} = 10 \text{ nF } 50 \text{ V}$
 $C_{11} = 10 \text{ nF } 50 \text{ V}$
 $C_{12} = 10 \text{ nF } 50 \text{ V}$
 $C_{13} = 10 \text{ nF } 50 \text{ V}$
 $C_{14} = 22 \mu\text{F } 25 \text{ V}$
 $C_{15} = 1.0 \mu\text{F } 50 \text{ V}$ Multilayer
 $C_{16} = 10 \text{ nF } 50 \text{ V}$
 $C_{17} = 10 \text{ nF } 50 \text{ V}$
 $C_{18} = 10 \text{ nF } 50 \text{ V}$
 $R_1 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_2 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_3 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_4 = 1,0 \Omega \frac{1}{2}\text{W}$
 $R_5 = 12 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_6 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_7 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_8 = 15 \text{ K}\Omega \frac{1}{4}\text{W}$

$R_9 = 1,0 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_{10} = 1,0 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_{11} = 8,2 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_{12} = 470 \Omega 1\text{W}$
 $R_{13} = 4,7 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_{14} = 470 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_{15} = 1,0 \text{ M}\Omega \frac{1}{4}\text{W}$
 $R_{16} = 4,7 \text{ K}\Omega \frac{1}{4}\text{W}$
 $D_1 = 1\text{N4148}$
 $D_2 = 1\text{N4148}$
 $D_3 = 1\text{N4148}$
 $\text{Led}_1 = \text{TX (red)}$
 $\text{Led}_2 = \text{Pre ON (yellow)}$
 $\text{Led}_3 = \text{Lin ON (green)}$
 $\text{Led}_4 = \text{Input Power (bi-color)}$
 $\text{da } \text{Led}_5 \text{ a } \text{Led}_{11} = \text{Watt (green)}$
 $DZ_1 = 15 \text{ V } 1,3\text{W}$
 $DZ_2 = 15 \text{ V } 1,3\text{W}$
 $Tr_1 = \text{BD 179}$
 $Ic_1 = \text{LM 3915}$
 $Ic_2 = \text{NE555}$
 $\text{Conn}_1 = \text{To amplifier board}$
 $J_1 = \text{To remote command}$
 $S_1 = \text{Lin ON}$
 $S_2 = \text{Input power}$
 $S_3 = \text{Pre ON}$
 $S_4 = \text{SSB}$

Remote Control

$C_1 = 10 \text{ nF } 50 \text{ V}$
 $C_2 = 22 \mu\text{F } 25 \text{ V}$
 $C_3 = 10 \text{ nF } 50 \text{ V}$
 $C_4 = 10 \text{ nF } 50 \text{ V}$
 $C_5 = 10 \text{ nF } 50 \text{ V}$
 $C_6 = 100 \text{ nF } 50 \text{ V}$
 $C_7 = 100 \text{ nF } 50 \text{ V}$
 $C_8 = 10 \mu\text{F } 25 \text{ V}$
 $R_1 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_2 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_3 = 8,2 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_4 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_5 = 2,2 \text{ K}\Omega \frac{1}{2}\text{W}$
 $R_6 = 1,0 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_7 = 8,2 \text{ K}\Omega \frac{1}{4}\text{W}$
 $R_8 = 10 \text{ K}\Omega \frac{1}{4}\text{W}$
 $Ic_1 = \text{LM 3915}$
 $Ic_2 = \text{LM 7812}$
 $\text{Led and S} = \text{same to command board}$