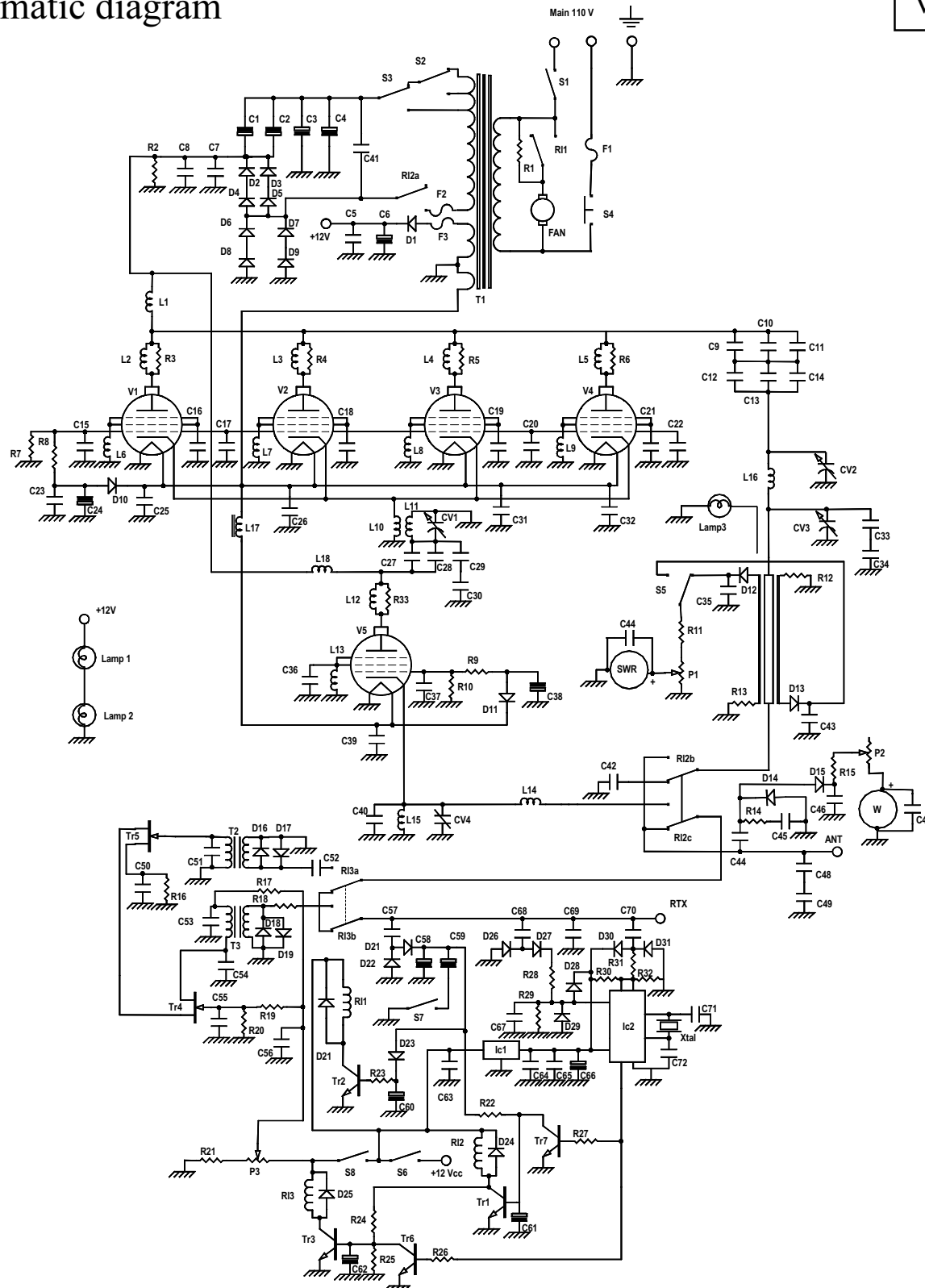
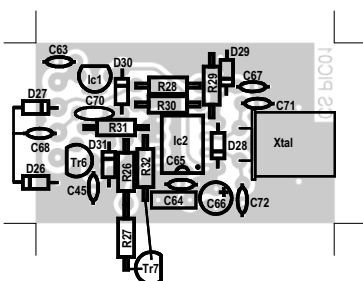
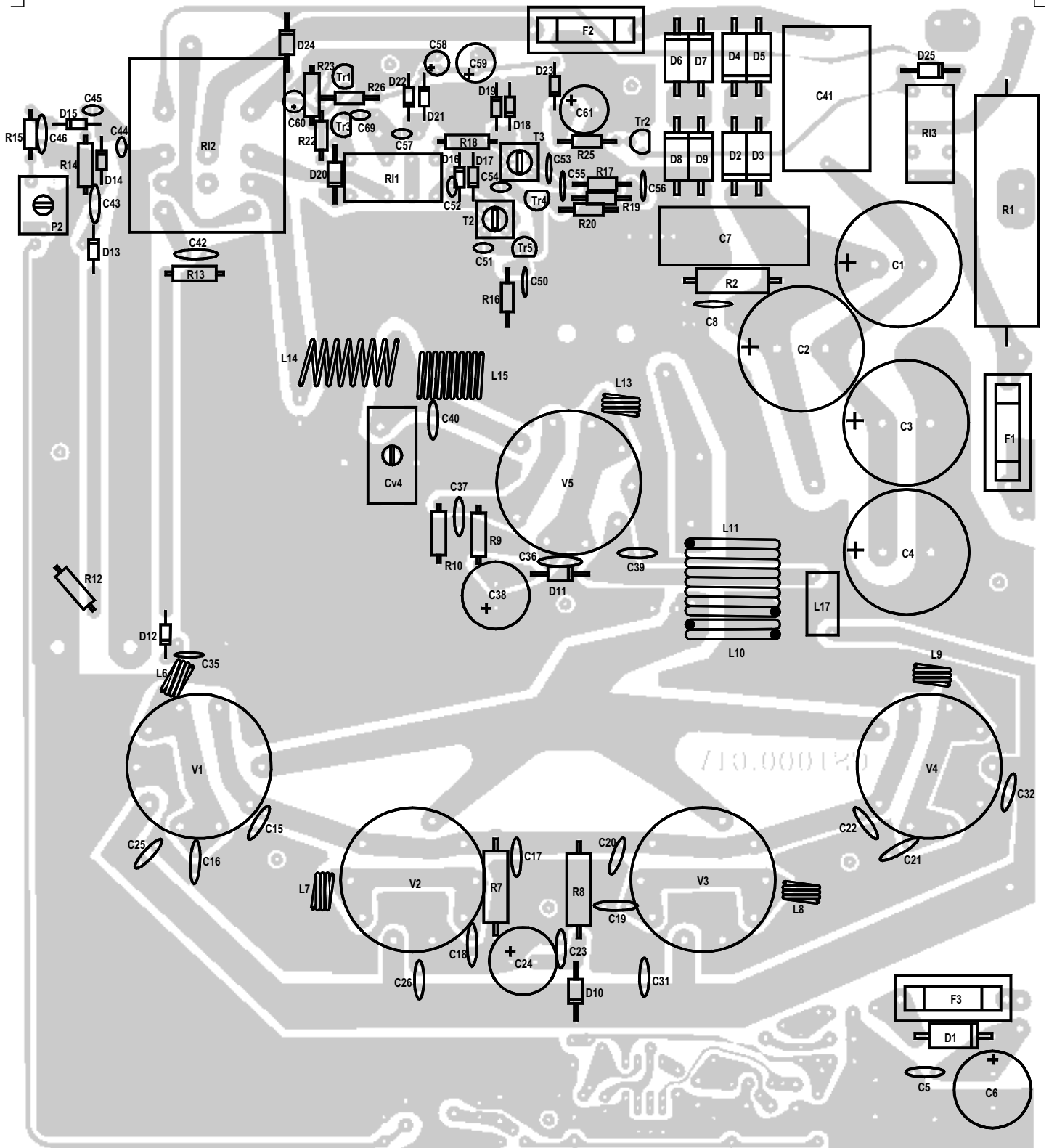


# Mod. KLV 1000 linear amplifier

Schematic diagram

Version 2.10





**List of components**

C 1	= 100 $\mu$ F	450 V		C 49	= 68 pF	500 V	N750
C 2	= 100 $\mu$ F	450 V		C 50	= 10 nF	50V	
C 3	= 100 $\mu$ F	450 V		C 51	= 27 pF	50 V	N750
C 4	= 100 $\mu$ F	450 V		C 52	= 10 nF	50V	
C 5	= 100 nF	50V		C 53	= 10 nF	50V	
C 6	= 2200 $\mu$ F	16 V		C 54	= 33 pF	50 V	N750
C 7	= 2,2 nF	1000V		C 55	= 10 nF	50V	
C 8	= 22 nF	1000 V		C 56	= 10 nF	50V	
C 9	= 2,2 nF	1500 V		C 57	= 8,2 pF	50 V	N750
C 10	= 2,2 nF	1500 V		C 58	= 10 $\mu$ F	16V	
C 11	= 2,2 nF	1500 V		C 59	= 47 $\mu$ F	16V	
C 12	= 2,2 nF	1500 V		C 60	= 10 $\mu$ F	16V	
C 13	= 2,2 nF	1500 V		C 61	= 220 $\mu$ F	16V	
C 14	= 2,2 nF	1500 V		C 62	= 10 $\mu$ F	16V	
C 15	= 100 nF	50V		C 63	= 10 nF	50 V	
C 16	= 150 pF	500 V	N750	C 64	= 100 nF	63 V	polyester
C 17	= 100 nF	50V		C 65	= 10 nF	50 V	
C 18	= 150 pF	500 V	N750	C 66	= 22 $\mu$ F	16 V	
C 19	= 150 pF	500 V	N750	C 67	= 10 nF	50 V	
C 20	= 100 nF	50V		C 68	= 3,3 pF	50 V	N750
C 21	= 150 pF	500 V	N750	C 69	= 27 pF	50 V	N750
C 22	= 100 nF	50V		C 70	= 2,2 pF	50 V	N750
C 23	= 100 nF	50V		C 71	= 27 pF	50 V	N750
C 24	= 470 $\mu$ F	50 V		C 72	= 27 pF	50 V	N750
C 25	= 100 nF	50 V		Cv 1	= Variable condensor	30 pF	
C 26	= 100 nF	50 V		Cv 2	= Variable condensor	50 pF	
C 27	= 2,2 nF	1500 V		Cv 3	= Variable condensor	350 pF	
C 28	= 2,2 nF	1500 V		Cv 4	= Trimmer	10 - 100 pF	
C 29	= 22 pF	500 V	N750	R 1	= 820 $\Omega$	17W	
C 30	= 22 pF	500 V	N750	R 2	= 470 K $\Omega$	2W	
C 31	= 100 nF	50 V		R 3	= 47 $\Omega$	5W	
C 32	= 100 nF	50 V		R 4	= 47 $\Omega$	5W	
C 33	= 270 pF	500 V	N750	R 5	= 47 $\Omega$	5W	
C 34	= 270 pF	500 V	N750	R 6	= 47 $\Omega$	5W	
C 35	= 100 nF	50 V		R 7	= 1,0 K $\Omega$	2W	
C 36	= 150 pF	500 V	N750	R 8	= 100 $\Omega$	2W	
C 37	= 100 nF	50 V		R 9	= 1,0 K $\Omega$	½W	
C 38	= 470 $\mu$ F	50 V		R 10	= 1,0 K $\Omega$	½W	
C 39	= 100 nF	50 V		R 11	= 47 K $\Omega$	¼W	
C 40	= 100 pF	50 V N750		R 12	= 100 $\Omega$	½W	
C 41	= 470 nF	630 V~		R 13	= 100 $\Omega$	½W	
C 42	= 470 pF	50 V	N750	R 14	= 27 $\Omega$	½W	
C 43	= 100 nF	50 V		R 15	= 47 K $\Omega$	¼W	
C 44	= 2,2 pF	50 V	N750	R 16	= 180 $\Omega$	¼W	
C 45	= 33 pF	50 V	N750	R 17	= 470 $\Omega$	¼W	
C 46	= 100 nF	50 V		R 18	= 18 $\Omega$	½W	
C 47	= 100 nF	50 V		R 19	= 56 K $\Omega$	¼W	
C 48	= 68 pF	500 V	N750				

R <sub>20</sub> = 22 KΩ ¼W	S <sub>4</sub> = Protection Switch
R <sub>21</sub> = 4,7 KΩ ¼W	S <sub>5</sub> = Switch (DIR - CAL)
R <sub>22</sub> = 12 KΩ ¼W	S <sub>6</sub> = Switch 3A (St.By - ON)
R <sub>23</sub> = 2,2 KΩ ¼W	S <sub>7</sub> = Switch 3A (AM - SSB)
R <sub>24</sub> = 12 KΩ ¼W	S <sub>8</sub> = Switch 3A (Pre ON - OFF)
R <sub>25</sub> = 680 Ω ¼W	T <sub>1</sub> = Transformator IN 110
R <sub>26</sub> = 2,2 KΩ ¼W	OUT 0-200-250-300V 0 - 12 V 0 - 6 V
R <sub>27</sub> = 2,2 KΩ ¼W	T <sub>2</sub> = T <sub>3</sub> = Transformers 30 MHz
R <sub>28</sub> = 56 KΩ ¼W	Fan = Fan 110 Vac
R <sub>29</sub> = 1,0 MΩ ¼W	
R <sub>30</sub> = 10 KΩ ¼W	
R <sub>31</sub> = 100 Ω ¼W	
R <sub>32</sub> = 10 KΩ ¼W	
R <sub>33</sub> = 47 Ω 5W	
P <sub>1</sub> = Potenziometer 4,7 KΩ	
P <sub>2</sub> = Trimmer 220 KΩ	
P <sub>3</sub> = Potenziometer 4,7 KΩ	
D <sub>1</sub> = 1N5400	
D <sub>2</sub> = D <sub>3</sub> = D <sub>4</sub> = D <sub>5</sub> = BY 255	
D <sub>6</sub> = D <sub>7</sub> = D <sub>8</sub> = D <sub>9</sub> = BY 255	
D <sub>10</sub> = D <sub>11</sub> = D <sub>20</sub> = D <sub>24</sub> = D <sub>25</sub> = 1N4004	
D <sub>12</sub> = D <sub>13</sub> = D <sub>14</sub> = D <sub>15</sub> = D <sub>16</sub> = 1N4148	
D <sub>17</sub> = D <sub>18</sub> = D <sub>19</sub> = D <sub>21</sub> = D <sub>22</sub> = D <sub>23</sub> = 1N4148	
D <sub>26</sub> = D <sub>27</sub> = D <sub>28</sub> = D <sub>29</sub> = D <sub>30</sub> = D <sub>31</sub> = 1N4148	
Tr <sub>1</sub> = Tr <sub>2</sub> = Tr <sub>3</sub> = Tr <sub>6</sub> = Tr <sub>7</sub> = BC 547	
Tr <sub>4</sub> = Tr <sub>5</sub> = BF 245	
Ic <sub>1</sub> = LM 78L05	
Ic <sub>2</sub> = PIC 12C508A	
Xtal = 4,0 MHz	
V <sub>1</sub> = V <sub>2</sub> = V <sub>3</sub> = V <sub>4</sub> = V <sub>5</sub> = EL 509 - EL 519	
L <sub>1</sub> = L <sub>18</sub> = RF impedance block	
L <sub>2</sub> = L <sub>3</sub> = L <sub>4</sub> = L <sub>5</sub> = L <sub>12</sub> = 3 turns wound on resistor, wire φ 0.8 mm	
L <sub>6</sub> = L <sub>7</sub> = L <sub>8</sub> = L <sub>9</sub> = L <sub>13</sub> = 3 turns φ 6 mm wire φ 0.8 mm	
L <sub>10</sub> = 6 turns φ 15 mm wire φ 2,0 mm tap 4 <sup>a</sup> turn	
L <sub>11</sub> = 2 turns φ 15 mm wire φ 2,0 mm	
L <sub>14</sub> = 7 turns φ 8 mm wire φ 0,8 mm	
L <sub>15</sub> = 9 turns φ 8 mm wire φ 0,8 mm	
L <sub>16</sub> = 3 turns φ 34 mm wire φ 3,0 mm	
L <sub>17</sub> = VK 200	
RI <sub>1</sub> = RI <sub>3</sub> = Relè 12 V 3022	
RI <sub>2</sub> = Relè 12 V 6043	
F <sub>1</sub> = 16 A	
F <sub>2</sub> = 4 A	
F <sub>3</sub> = 2 A	
Lamp <sub>1</sub> = Lamp <sub>2</sub> = Meters lamp	
Lamp <sub>3</sub> = 24 V	
S <sub>1</sub> = Switch (ON - OFF)	
S <sub>2</sub> = Switch (HI1 - HI2)	
S <sub>3</sub> = Switch (LOW - HI)	