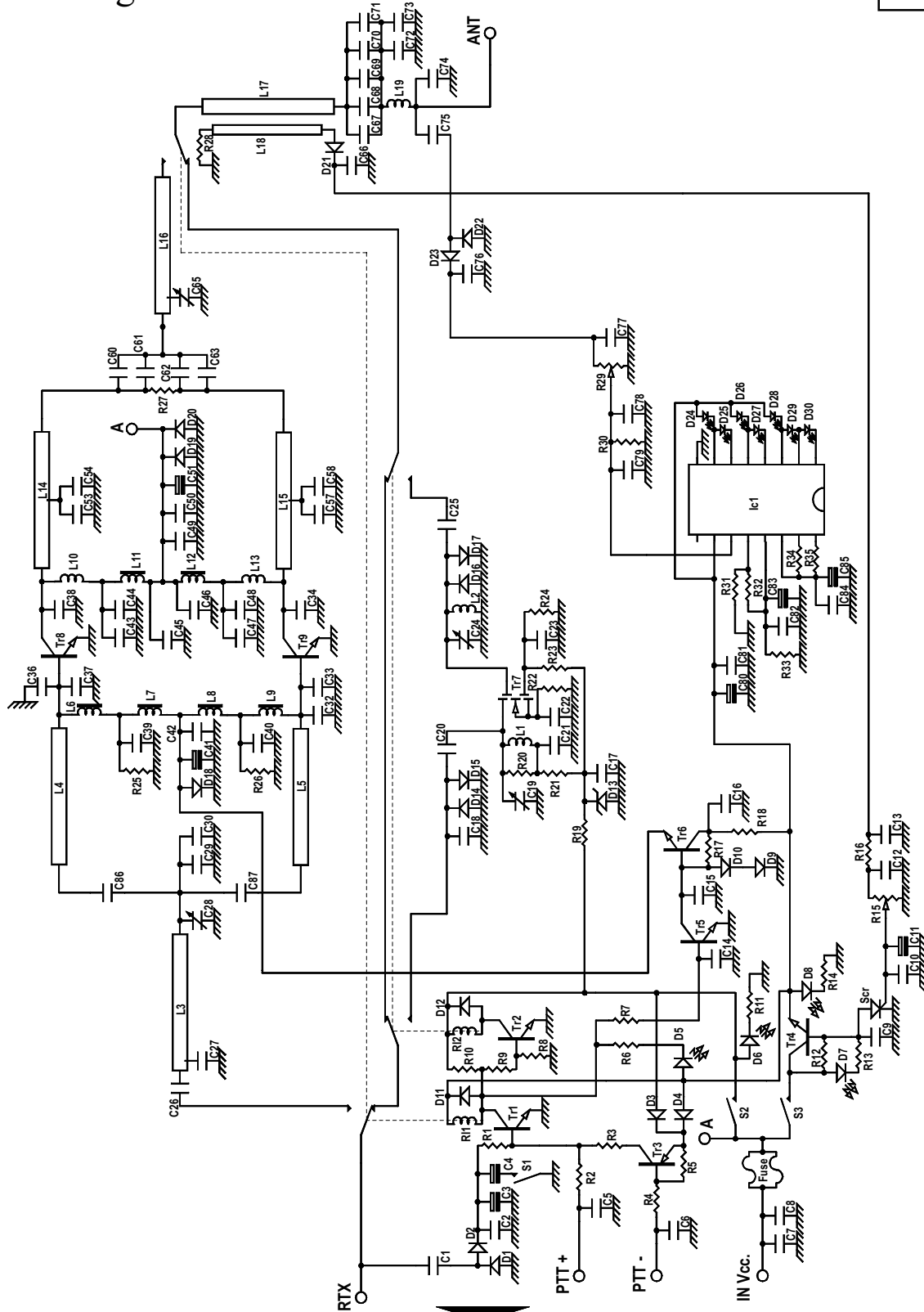


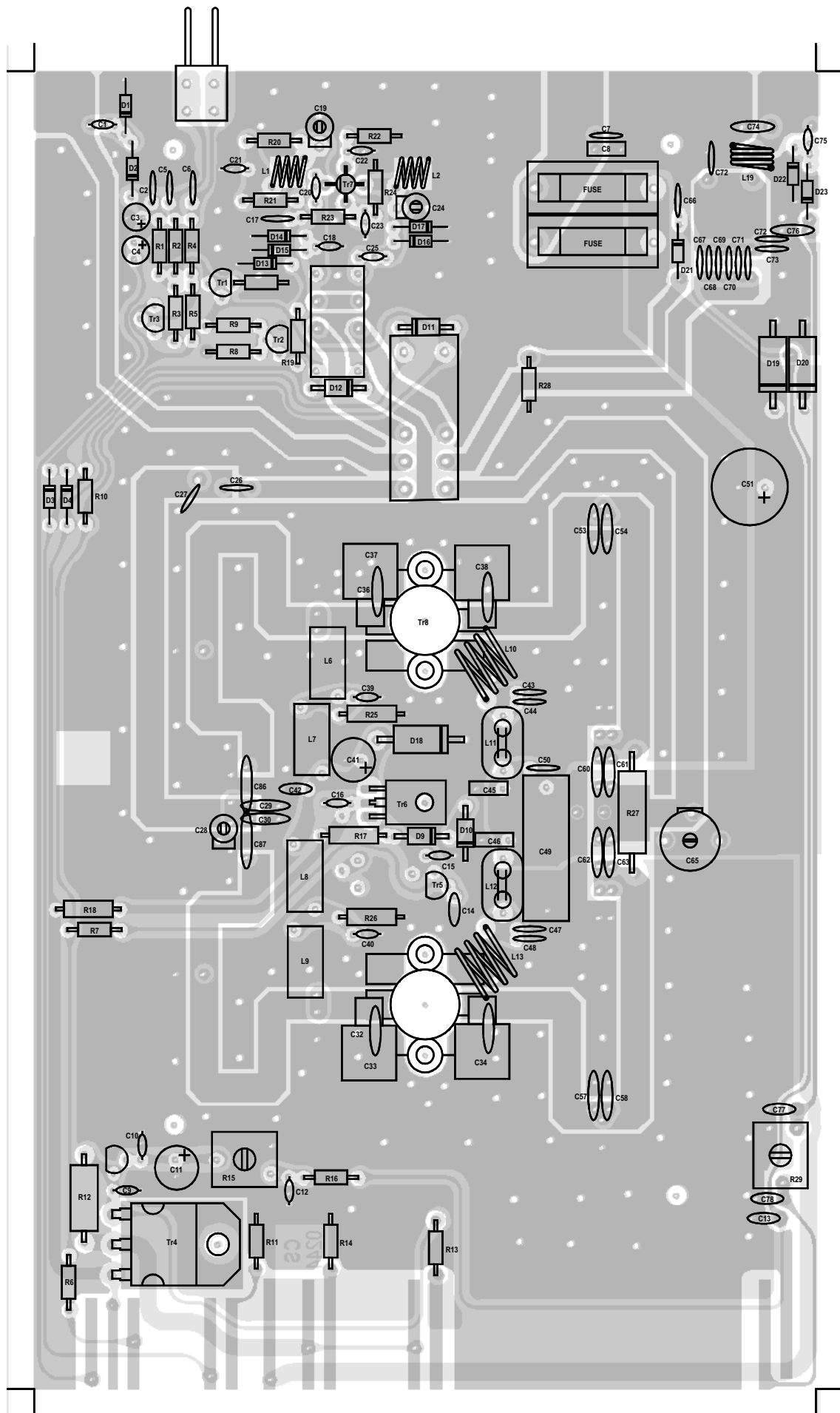


## Mod. VLA 200-2 VHF linear amplifier

Schematic diagram

Version 1.02





## List of components

C <sub>1</sub>	= 2,2 pF	NP0	50 V		C <sub>51</sub>	= 470 µF	25 V
C <sub>2</sub>	= 1,0 nF		50 V		C <sub>53</sub>	= 33 pF	NP0 500 V
C <sub>3</sub>	= 4,7 µF		16 V		C <sub>54</sub>	= 33 pF	NP0 500 V
C <sub>4</sub>	= 33 µF		16 V		C <sub>57</sub>	= 33 pF	NP0 500 V
C <sub>5</sub>	= 1,0 nF		50 V		C <sub>58</sub>	= 33 pF	NP0 500 V
C <sub>6</sub>	= 1,0 nF		50 V		C <sub>60</sub>	= 1,0 nF	500 V
C <sub>7</sub>	= 10 nF		50 V		C <sub>61</sub>	= 1,0 nF	500 V
C <sub>8</sub>	= 220 nF		63 V	Multilayer	C <sub>62</sub>	= 1,0 nF	500 V
C <sub>9</sub>	= 1,0 nF		50 V		C <sub>63</sub>	= 1,0 nF	500 V
C <sub>10</sub>	= 1,0 nF		50 V		C <sub>65</sub>	= Trimmer	10 - 80 pF
C <sub>11</sub>	= 10 µF		16 V		C <sub>66</sub>	= 1,0 nF	50 V
C <sub>12</sub>	= 1,0 nF		50 V		C <sub>67</sub>	= 180 pF	N750 500V
C <sub>13</sub>	= 1,0 nF		50 V		C <sub>68</sub>	= 180 pF	N750 500V
C <sub>14</sub>	= 1,0 nF		50 V		C <sub>69</sub>	= 180 pF	N750 500V
C <sub>15</sub>	= 1,0 nF		50 V		C <sub>70</sub>	= 180 pF	N750 500V
C <sub>16</sub>	= 1,0 nF		50 V		C <sub>71</sub>	= 180 pF	N750 500V
C <sub>17</sub>	= 1,0 nF		50 V		C <sub>72</sub>	= 12 pF	NP0 500 V
C <sub>18</sub>	= 4,7 pF	NP0	50 V		C <sub>73</sub>	= 12 pF	NP0 500 V
C <sub>19</sub>	= Trimmer		3 - 10 pF		C <sub>74</sub>	= 22 pF	NP0 500 V
C <sub>20</sub>	= 4,7 pF	NP0	50 V		C <sub>75</sub>	= 2,2 pF	NP0 50 V
C <sub>21</sub>	= 1,0 nF		50 V		C <sub>76</sub>	= 1,0 nF	50 V
C <sub>22</sub>	= 1,0 nF		50 V		C <sub>77</sub>	= 1,0 nF	50 V
C <sub>23</sub>	= 1,0 nF		50 V		C <sub>78</sub>	= 1,0 nF	50 V
C <sub>24</sub>	= Trimmer		3 - 10 pF		C <sub>79</sub>	= 10 nF	50 V
C <sub>25</sub>	= 3,9 pF	NP0	50 V		C <sub>80</sub>	= 10 µF	16 V
C <sub>26</sub>	= 470 pF	N750	50 V		C <sub>81</sub>	= 10 nF	50 V
C <sub>27</sub>	= 8,2 pF	NP0	500 V		C <sub>82</sub>	= 10 nF	50 V
C <sub>28</sub>	= Trimmer		5 - 20 pF		C <sub>83</sub>	= 4,7 µF	16 V
C <sub>29</sub>	= 18 pF	NP0	500 V		C <sub>84</sub>	= 10 nF	50 V
C <sub>30</sub>	= 18 pF	NP0	500 V		C <sub>85</sub>	= 10 µF	16 V
C <sub>32</sub>	= 12 pF	NP0	500 V		C <sub>86</sub>	= 470 pF	N750 50 V
C <sub>33</sub>	= 270 pF		500 V	Mica	C <sub>87</sub>	= 470 pF	N750 50 V
C <sub>34</sub>	= 390 pF	500 V	Mica +56 pF	500 V NP0	R <sub>1</sub>	= 2,2 KΩ	¼ W
C <sub>36</sub>	= 12 pF	NP0	500 V		R <sub>2</sub>	= 2,2 KΩ	¼ W
C <sub>37</sub>	= 270 pF		500 V	Mica	R <sub>3</sub>	= 2,2 KΩ	¼ W
C <sub>38</sub>	= 390 pF	500 V	Mica +56 pF	500 V NP0	R <sub>4</sub>	= 12 KΩ	¼ W
C <sub>39</sub>	= 1,0 nF		50 V		R <sub>5</sub>	= 2,2 KΩ	¼ W
C <sub>40</sub>	= 1,0 nF		50 V		R <sub>6</sub>	= 1,0 KΩ	¼ W
C <sub>41</sub>	= 47 µF		16 V		R <sub>7</sub>	= 12 KΩ	¼ W
C <sub>42</sub>	= 1,0 nF		50 V		R <sub>8</sub>	= 12 KΩ	¼ W
C <sub>43</sub>	= 2,2 nF		500 V		R <sub>9</sub>	= 12 KΩ	¼ W
C <sub>44</sub>	= 1,0 nF		500 V		R <sub>10</sub>	= 4,7 KΩ	¼ W
C <sub>45</sub>	= 220 nF		63 V	Multilayer	R <sub>11</sub>	= 1,0 KΩ	¼ W
C <sub>46</sub>	= 220 nF		63 V	Multilayer	R <sub>12</sub>	= 330 Ω	2 W
C <sub>47</sub>	= 1,0 nF		500 V		R <sub>13</sub>	= 1,0 KΩ	¼ W
C <sub>48</sub>	= 2,2 nF		500 V		R <sub>14</sub>	= 1,0 KΩ	¼ W
C <sub>49</sub>	= 33 nF		1000 V	Polyester	R <sub>15</sub>	= Trimmer	4,7 KΩ
C <sub>50</sub>	= 100 nF		50 V		R <sub>16</sub>	= 2,2 KΩ	¼ W

R <sub>17</sub> = 1,2 KΩ	¼ W	L <sub>9</sub> = VK 200	
R <sub>18</sub> = 1,0 Ω	½ W	L <sub>10</sub> = 3 turns φ 8 mm wire φ 1,5 mm	
R <sub>19</sub> = 470 Ω	¼ W	L <sub>11</sub> = 2 turns wire φ 1,5 mm on ½ balum	
R <sub>20</sub> = 1,0 KΩ	¼ W	L <sub>12</sub> = 2 turns wire φ 1,5 mm on ½ balum	
R <sub>21</sub> = 150 Ω	¼ W	L <sub>13</sub> = 3 turns φ 8 mm wire φ 1,5 mm	
R <sub>22</sub> = 220 Ω	¼ W	L <sub>14</sub> = Strip line	
R <sub>23</sub> = 6,8 KΩ	¼ W	L <sub>15</sub> = Strip line	
R <sub>24</sub> = 3,3 KΩ	¼ W	L <sub>16</sub> = Strip line	
R <sub>25</sub> = 10 Ω	½ W	L <sub>17</sub> = Strip line	
R <sub>26</sub> = 10 Ω	½ W	L <sub>18</sub> = Strip line	
R <sub>27</sub> = 100 Ω	2 W	L <sub>19</sub> = 3 turns φ 6 mm wire φ 1,2 mm	
R <sub>28</sub> = 100 Ω	¼ W	RL <sub>1</sub> = 4052 - 12	
R <sub>29</sub> = Trimmer	220 KΩ	RL <sub>2</sub> = 3022 - 12	
R <sub>30</sub> = 180 Ω	¼ W	Fuse = 2 x 12 A	
R <sub>31</sub> = 10 KΩ	¼ W	S <sub>1</sub> = Switch 3A	(FM - SSB)
R <sub>32</sub> = 100 KΩ	¼ W	S <sub>2</sub> = Switch 3A	(Pre ON - OFF)
R <sub>33</sub> = 22 KΩ	¼ W	S <sub>3</sub> = Switch 3A	(Lin ON - OFF)
R <sub>34</sub> = 22 KΩ	¼ W		
R <sub>35</sub> = 10 KΩ	¼ W		
D <sub>1</sub> = D <sub>2</sub> = D <sub>3</sub> = D <sub>4</sub> = 1N4148			
D <sub>5</sub> = Led	(red)		
D <sub>6</sub> = Led	(yellow)		
D <sub>7</sub> = Led	(red)		
D <sub>8</sub> = Led	(green)		
D <sub>9</sub> = D <sub>10</sub> = D <sub>11</sub> = D <sub>12</sub> = 1N4004			
D <sub>13</sub> = Zener 5,1 V	½ W		
D <sub>14</sub> = D <sub>15</sub> = D <sub>16</sub> = D <sub>17</sub> = 1N4148			
D <sub>18</sub> = D <sub>19</sub> = D <sub>20</sub> = 1N5400			
D <sub>21</sub> = D <sub>22</sub> = D <sub>23</sub> = 1N4148			
D <sub>24</sub> = D <sub>25</sub> = D <sub>26</sub> = D <sub>27</sub> = Led	(green)		
D <sub>28</sub> = D <sub>29</sub> = D <sub>30</sub> = Led	(green)		
Tr <sub>1</sub> = BC 547			
Tr <sub>2</sub> = BC 547			
Tr <sub>3</sub> = BC 557			
Tr <sub>4</sub> = TIP 142			
Tr <sub>5</sub> = BC 547			
Tr <sub>6</sub> = BD 175			
Tr <sub>7</sub> = BF 966			
Tr <sub>8</sub> = SD 1477			
Tr <sub>9</sub> = SD 1477			
Scr = C 102			
Ic <sub>1</sub> = KA 2288			
L <sub>1</sub> = 4 turns φ 5 mm wire φ 0,8 mm			
L <sub>2</sub> = 4 turns φ 5 mm wire φ 0,8 mm			
L <sub>3</sub> = Strip line			
L <sub>4</sub> = Strip line			
L <sub>5</sub> = Strip line			
L <sub>6</sub> = VK 200			
L <sub>7</sub> = VK 200			
L <sub>8</sub> = VK 200			