

PROBLEM SOLVING GUIDE OF THE 11AK19 MAINBOARD :

NR	PROBLEM	DESCRIPTIONS	DEFECTED COMPONENTS
1	No sound (mono)	1-Speakers 2-IC100 pin 5: -12.5VDC 3-IC100 pin 7: +12.5VDC 4-IC100 pin 2: +12.5VDC 5-IC100 pin 9: Sound signal (Scop) 6-IC401 pin 15: Sound signal (Scop) 7-IC401 pin 55: Sound signal (Scop)	Speakers, IC100, IC502, IC401, Q402
2	No sound (stereo)	1-Speakers 2-IC100 pin 5: -12.5VDC 3-IC100 pin 7: +12.5VDC 4-IC100 pin 2: +12.5VDC 5-IC100 pin 9: Sound signal (Scop) 6-IC100 pin 1: Sound signal (Scop) 7-PL404 pin 4: Sound signal (Scop) 8-PL404 pin 5: Sound signal (Scop)	Speakers, Sound Board, IC100, IC502
3	No sound (Secam L mono)	1-IC501 pin 9 :0V 2-IC501 pin 18 :5V 3-IC401 pin 2: Sound signal (Scop) 4-IC402 pin 8: Sound signal (Scop)	IC402
4	No sound in the Nicam mode		IC502
5	Sound level is low (mono)	1-IC401 pin 55: 3V DC 2-500mVpp audio (Scop) 3-100mVpp RF signal (Scop)	Q401, IC100
6	Not working (Supply is defective)	1-An isolation transformer should be used while measuring the voltages on nthe primary side. 2-Driving signal must be exist on the gate of Q802 (Scop). 3-There should be +12V DC supply voltage on the pin 1 of IC802. 4-Are all of the secodary voltages O.K? 5-Pin 41 of IC501 must be +5V in normal working mode and it must be 0V in ST-BY.	Q802, IC801, IC802, R806, R817, D801, D802, D803, D804, D807, D812, D823, Q810, TR802, F801, R813, R814, Q805, Q806, Q807, Q809
7	Not working	1-Disconnect the pins 4 and 5 of IC502. If	IC502, IC501, IC701, Q605, IC401,

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7	(Supply is working)	TV works, replace IC502 with the new and the right prorammed one) 2-Horizontal drive signal should included on the 40 of IC401 (Scop) 3-IC401 pin 40: 1.1V (on mode) 4-IC401 pin 40: +8V (st-by) 5-D602 : 1V 6-D607 12.5V	IC100, Q603, TR601, D603, D609, IC901, R605
8	There is not Light (when the increase the screen voltage, to be seen flyback lines.)	1-Pin 22 of IC401: The vertical pulse amplitude level must be 5Vpp (60Hz) (Scop) 2-Pin 18 of IC401: The black current signal level must be 7 Vpp. (Scop)	D609, IC901, IC401, IC701, IC502, IC501, Q801, D808, D701, C803, C708, Q701, Q426, D603, PL402 Kablosu
9	Picture is wide	1-Cathode of D816 : 115VDC (For 110° models: 150VDC)	C611
10	Picture is narrow	1-The voltage on the cathode of D816 must be 115VDC for 90 degree models (It should be 150VDC for 110 deg. Models)	C611, TR602, Q809
11	There is not light (Flaman is not working)	1-The voltage between the pins F1 and F2 of tube socket must be 6.3V RMS or 20Vpp (Scop)	R611, PL602 Kablosu
12	Faults of teletext part.	1-Pin 30 of IC501 : Video signal level must be 1.2 Vpp (Scop)	IC501, L501, IC502, Q702, R547, D506, D507, Q702
13	Vertical is not working.	1-Pin 3 of IC701: +15V 2-Pin 1 of IC701: Vertical drive signal must to be (1Vpp scop)	IC701, IC401, IC901, IC502, R702, R703, D606
14	Vertical is folded	1-Pin 6 of IC701: +45V	IC701, R704, IC502, C632, C702, R704, D605
15	There is not station (PLL Tuner)	1-Pin 4 of Tuner: SCL 4.5Vpp (Scop) 2-Pin 5 of Tuner: SDA 4.5Vpp (Scop) 3-Pin 9 of Tuner : +20V DC 4-Pin 7 of Tuner : +5V DC 5-Pin 1 of Tuner : +2V DC (aproix.)	IC502, TU201, IC501, IC401, D604, Q407

16	There is not station (VST Tuner)	1-Pin 3 of Tuner: +5V DC (UHF) 2-Pin 4 of Tuner: +5V DC (VHF3) 3-Pin 5 of Tuner: +5V DC (VHF1) 4-Pin 6 of Tuner: +5V DC 5-Pin 1 of Tuner: +2V DC (aproix.) 6-Pin 2 of Tuner: From 0' to 33V DC variable	IC502,TU201,IC501,IC401,D604, Q502,Q510,Q508,Q501,Q407
17	Led is on, but some late		Q810
18	Led is off		Q810,Q512,IC801
19	Led is blink	1-There may be a short-cut or overcurrent situation on one of the supplying voltages. E.g. +5V, +8V etc.	IC501,Q810,CRT,D605,IC801, IC401,IC901,D811,D812,Q605, IC100,Q805,Q806,Q807
20	Remote control is not controlling to TV.	1-Pin 15 of IC501 : +5VDC 2-Pin 2 of MD501 : +5VDC 3-Pin 3 of MD501 : IR signal level must be 5Vpp.	MD501,IC100,IC501,IC502
21	Vertical lines are broking in the picture	1-CRT aqua cable maybe snap.	D420,Q810,D402,D601,IC401, C618, AQUA CABLE,C604,R717,C435,C436
22	Coloured snowy		IC401,IC502
23	There is no colour in the picture		IC401,X401,IC502
24	High voltage spark		CRT,TR602
25	No OSD	1-Pin 45 of IC501 : Sandcastel input signal level must be 4Vpp (Scoop) 2-Pin 38 and 39 of IC501: 4.5Vpp osc. signal (Scoop) 3-Pin 26 of IC401 : Fast-Blank signal level must be +4Vpp when OSD is activated.(Scoop)	IC501,IC502,IC401,R486,Q420, R554,R488,L501,C511,C512
26	Faults of OSD		D506,IC501,D507,D508,IC401,

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26 Faults of OSD

			IC502
27	Light is little		R615,D608,D701,IC901
28	Light is much		D408,IC401,IC502
29	East-West geometry adjustment is fault.		D612,L604,R629,Q603,IC401, D611,R606,C626
30	Sync. is sliding.	1-IC401 pin 13: Video signal input pals must be 1.3Vpp.	IC502,Q407
31	Folding from left and right sides		C611
32	No picture in PIP		IC050
33	No screen adjustment	1-Screen cable may be defected.	IC901,D609,C903,TR802
34	Spot in the middle of the screen		Q601,C902,IC901
35	Blue picture in Secam		C415
36	Raster is O.K (picture is milky)	1-IC401 pin 13: Video signal input 1.3Vpp.	IC401,IC701
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