

PROBLEM SOLVING GUIDE OF THE 11AK19 MAINBOARD :

From the "Problem Solving Guide" menu you select a chassis and see the "Problem Solving Guide" page designed for that chassis. In these pages, you can see some well-known and mostly faced problems and some hints to detect the source of the problem. If the conditions in the "Descriptions" parts are the situations that you face up with, then beside that description, you can see the "Defected components" to be replaced for solving the problem.

| 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 the primary side. 2-Driving signal must 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 secondary 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 (Supply is working) | 1-Disconnect the pins 4 and 5 of IC502. If TV works, replace IC502 with the new and the right programmed one) 2-Horizontal drive signal should be 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 | IC502, IC501, IC701, Q605, IC401, 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 (50Hz) (Scop) 2-Pin 18 of IC401: The black current signal level must be 7 Vpp. (Scop) | D609, IC901, IC401, IC701, IC502, IC501, Q601, D608, D701, C903, C708, Q701, Q426, D603, PL402 Kablosu |

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|----|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 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 for110 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 (Scop) 2-Pin 38 and 39 of IC501: 4.5Vpp osc. signal (Scop) 3-Pin 26 of IC401 : Fast-Blank signal level must be +4Vpp when OSD is activated.(Scop) | IC501,IC502,IC401,R486,Q420, R554,R488,L501,C511,C512 |
| 26 | Faults of OSD | | D506,IC501,D507,D508,IC401, IC502 |

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|----|----------------------------------------|---------------------------------------------------------|-------------------------------------------|
| 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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| | | | Hazirlayan: Ercan ÖZ |

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