



Troubleshooting Guide

- electrical -



Sony Ericsson Live with Walkman

WT19a, WT19i



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For general information about mechanical repair related issues, refer to 1220-1336: Generic Repair Manual – electrical



1 Troubleshooting Flow

1.1 Display

Symptom:	Display problems
Replace:	X7100 , if damaged Z7800 or Z7801
	vision check all pins



Troubleshooting Flow

1.2 Illumination

Symptom:	No Display illumination
Replace:	X7100 , if damaged vision check pin 2, 3 and 5 L7600 or L7610 , if more than 1 Ω C7603 , if short circuit V7601 N7600

Symptom:	No Key Back Light
Replace:	X7600 , if damaged vision check pin 14-16 N7600

Symptom:	No Right Top Light
Replace:	V7602 N7600

Symptom:	No Left Top Light
Replace:	V7603 N7600

Symptom:	No R G B MMI LED s
Replace:	N7806/V1003

Symptom:	No Flash LED
Replace:	L7801 ,if more than 1 Ω



Troubleshooting Flow

1.3 Keys & Sensors

Symptom:	On / Off key problems
Replace:	S52
Symptom:	Back Key, Menu Key and Display Touch Sensor problems
Replace:	X7600 , if damaged vision <i>check pin</i> 1-13 N5300
Symptom:	Volume Up key problems
Replace:	S110
Symptom:	Volume Down key problems
Replace:	S111
Symptom:	Camera key problems
Replace:	S112
Symptom:	Walkman key problems
Replace:	S113
Symptom:	Proximity sensor problems
Replace:	N7606/V1001 or N7606/V1002 N7606/N1001
Symptom:	Ambient Light Sensor problems
Replace:	N7806/N1 N7600
Symptom:	Compass problems
Replace:	N5401



Troubleshooting Flow

1.4 Alert

Symptom:	Vibrator problems
Replace:	B5100



Troubleshooting Flow

1.5 Audio

Symptom:	No audio
Replace:	L1001 ,if more than 1 Ω
Symptom:	No Primary Microphone
Replace:	L3503 or L3504 ,if more than 2 Ω B3501 N2800
Symptom:	No or bad Earphone / Ear speaker
Replace:	L3507 or L3508 ,if more than 1 Ω V3511 , if X3506 or X3507 is short circuit to GND N2800
Symptom:	No or bad Right Loudspeaker
Replace:	L3505 , L3506 , L3511 or L3512 ,if more than 2 Ω V3502 , if X3502 or X3503 is short circuit to GND N3502 N2800
Symptom:	No or bad Left Loudspeaker
Replace:	L3501 , L3502 , L3509 or L3510 ,if more than 2 Ω V3500 , if X3500 or X3504 is short circuit to GND N3501 N2800
Symptom:	No or bad Hands-free (PHF) Microphone
Replace:	L3100 or L3604 , if more than 2 Ω N3600 N2800
Symptom:	No or bad Hands-free (PHF) Aux Earphone / Ear speaker
Replace:	L3100 , L3600 , L3601 , L3602 or L3603 if more than 2 Ω N3600 N2800
Symptom:	No Hands-free (PHF) Microphone – Phone not recognizes PHF set
Replace:	L3100 , if more than 2 Ω N3600
Symptom:	No or bad FM Radio
Replace:	V3100 N8100



Troubleshooting Flow

1.6 On/Off

Symptom:	Current draw greater than 300 mA
Replace:	V1700 , if getting hot N2801C , if getting hot N2903 ,N2900 or N2902 , if getting hot
Symptom:	Current draw when powered off
Replace:	C1312C N2801C , if getting hot N2903 ,N2900 or N2902 , if getting hot
Symptom:	Using no current when On/Off key is pressed and will not start.
Replace:	S52
Symptom:	Draws current when On/Off key is pressed, returns to zero
Replace:	L1000, L1003, L1004 or L2400C , if more than 1 Ω N2401C
Symptom:	Others
Replace:	X1300 , if damaged vision check all pins



Troubleshooting Flow

1.7 Charging & Capacity

Symptom:	No or bad Charging from USB
Replace:	X2200 , if damaged vision check pin 1 and 5 X1300 , if damaged vision check all pins C1317 or C2200 , if X2200 pin 1 is short circuit to GND L1300C , if more than 1 Ω N1303C
Symptom:	Wrong Battery indicator
Replace:	N1302
Symptom:	Wrong Battery temperature
Replace:	V1701 , if X1300 pin 2 is short circuit to GND
Symptom:	No trickle Charging
Replace:	N1602



Troubleshooting Flow

1.8 SIM

Symptom:	SIM not detected
Replace:	X4000 , if damaged vision check all pins V4000 or V4001 , if short circuit to GND



Troubleshooting Flow

1.9 Camera

Symptom:	Main Camera problems	
Replace:	X7302 , if damaged	vision check all pins
	L1002 , if more than 1 Ω	



Troubleshooting Flow

1.10 Data Communication

Symptom:	No communication via the USB Connector, charging via USB connector is working
Replace:	X2200 , if damaged vision check pin 2, 3 and 4 N2200 , if X2200 pin 2,3 or 4 are short circuit to GND Z2200 , if more than 4 Ω between pin 1-2 and more than 4 Ω between pin 3-4

Symptom:	No Bluetooth and WLAN connection
Replace:	L8100 , if more than 2 Ω N8102

Symptom:	Bad Bluetooth and WLAN connection
Replace:	X8420 or X8421 , if damaged X8401 , if more than 1 Ω between term A and C Z8001

Symptom:	No Bluetooth and / or WLAN connection
Replace	N8100 N8101

Symptom:	No GPS connection
Replace:	X8422 or X8423 , if damaged Z8401 or Z8403C N8401 N2800



Troubleshooting Flow

1.11 Memory Stick / Card

Symptom:	Memory stick / Card (micro SD) not detected
Replace:	X4101 , if damaged vision check pin all pins V4100



Troubleshooting Flow

1.12 Network & Signal

Symptom:	Phone fails to lock on to network during radiated (wireless) Go/ No Go test
Action:	Use RF probe to perform conducted Go / No Go test
Symptom:	Phone passes conducted (RF cable) Go / No Go test but fails radiated (wireless) Go / No Go test
Check:	X2801 for damage and replace, if more than 1 Ω between A and C term
Replace:	Rear Cover Assembly
Action:	Rerun the phone through radiated (wireless) Go / No Go testing
Symptom:	Phone fails conducted (RF probe) Go / No Go test
Action:	Run the calibration routine
Symptom:	Fails conducted (RF probe) Go/No Go test, but passes calibration
Action:	Rerun the phone through Go/No Go testing
Symptom:	Fails any part of the calibration routine
Check:	X2801 for damage and replace, if more than 1 Ω between RF probe and C term or A and C term is short circuit then the probe is inserted.
Replace:	N2803C or N2800 , if GSM Low band Rx fault. N2803C , N2800 or Z2800C , if GSM High Band Rx fault N2803C or N2800 , if WCDMA Rx fault V8101 , N2801C , N2803C or N2800 , if GSM Tx fault N2900 , N2803C or N2800 ,if WCDMA Tx band 5 or 8 N2903 , N2803C or N2800 ,if WCDMA Tx band 1 fault N2902 , N2803C or N2800 ,if WCDMA Tx band 2 fault



2 Revision History

Rev.	Date	Changes / Comments
PA1	2011-09-26	Released