



Sony Ericsson

*Trouble Shooting Guide Repair Instruction Additional Soldering Process/*

# Troubleshooting Guide

## - electrical -



***Xperia™ arc S***  
***LT18i, LT18a***



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# 1 Troubleshooting Flow

## 1.1 Display

<b>Symptom:</b>	Display problem	
<b>Replace:</b>	<b>X7002</b> , if damaged <b>Z9800, Z9801 or Z9802</b>	vision check all pins

## Troubleshooting Flow

### 1.2 Illumination

<b>Symptom:</b>	No Display illumination	
<b>Replace:</b>	<b>X7002</b> , if damaged	vision check pin A11 - A12 and B7
	<b>L7600</b> , if more than 1 $\Omega$	
	<b>V7601</b>	
<b>Symptom:</b>	No Key Back Light	
<b>Replace:</b>	<b>X9800</b> , if damaged	vision check pin B4 and A3 - A4
<b>Symptom:</b>	R G B MMI LED s	
<b>Replace:</b>	<b>V5107</b>	
<b>Symptom:</b>	No Flash LED	
<b>Replace:</b>	<b>L7801</b> ,if more than 1 $\Omega$	



## Troubleshooting Flow

### 1.3 Keys & Sensors

**Symptom:** On / Off key problems

**Replace:** **X9801**, if damaged vision check pin B6 – B7

**Symptom:** Back Key problems

**Replace:** **X9800**, if damaged vision check pin B2 - B6

**Symptom:** Home Key problems

**Replace:** **X9800**, if damaged vision check pin B2 - B5

**Symptom:** Menu Key problems

**Replace:** **X9800**, if damaged vision check pin B2 - B3

**Symptom:** Camera shutter key problems

**Replace:** **X9800**, if damaged vision check pin A1 - A2 and B1 - B2

**Symptom:** Display Touch Sensor problems

**Replace:** **X5303**, if damaged vision check all pins

**Symptom:** Volume Up key problems

**Replace:** **S5203**

**Symptom:** Volume Down key problems

**Replace:** **S5204**

**Symptom:** Proximity sensor problems

**Replace:** **X9801**, if damaged vision check pin A10 - A11  
**N5500**

**Symptom:** Ambient Light Sensor problems

**Replace:** **X9801**, if damaged vision check pin B4 - B5

**Symptom:** Compass problems

**Replace:** **N5400**

## Troubleshooting Flow

### 1.4 Alert

<b>Symptom:</b>	Vibrator problems	
<b>Replace:</b>	<b>R9805</b> , if more than 1 $\Omega$	
	<b>X9801</b> , if damaged	vision check pin B11 - B12

## Troubleshooting Flow

### 1.5 Audio

Symptom:	No audio
Replace:	<b>L1001</b> ,if more than 1 $\Omega$
Symptom:	No Primary Microphone
Replace:	<b>X9800</b> , if damaged      vision check pin A6 - A7 and B8 <b>N2800</b>
Symptom:	No Secondary Microphone
Replace:	<b>L2852</b> or <b>L2853</b> ,if more than 3 $\Omega$ <b>B3502</b> <b>N2800</b>
Symptom:	No or bad Earphone / Ear speaker
Replace:	<b>X9801</b> , if damaged      vision check pin B8 and B9 <b>V3502</b> , if pin1 or pin 2 is short circuit to GND <b>N2800</b>
Symptom:	No or bad Loudspeaker
Replace:	<b>X9800</b> , if damaged      vision check pin A9 - A12 <b>V3500</b> , if pin1 or pin 2 is short circuit to GND <b>N2800</b>
Symptom:	No or bad Hands-free (PHF) Microphone
Replace:	<b>X9801</b> , if damaged      vision check pin A6 <b>L3100</b> or <b>L3604</b> , if more than 2 $\Omega$ <b>N2800</b>
Symptom:	No or bad Hands-free (PHF) Aux Earphone / Ear speaker
Replace:	<b>X9801</b> , if damaged      vision check pin A2 - A4 <b>L3602</b> or <b>L3603</b> if more than 2 $\Omega$ <b>N2800</b>
Symptom:	No Hands-free (PHF) Microphone – Phone not recognizes PHF set
Replace:	<b>X9801</b> , if damaged      vision check pin B1 - B2



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Symptom:	No or bad FM Radio	
Replace:	<b>X9801</b> , if damaged	vision check pin B3
	<b>V3100</b>	
	<b>N8102</b>	
	<b>N8100</b>	
	<b>N2800</b>	



## Troubleshooting Flow

### 1.6 On/Off

<b>Symptom:</b>	Current draw greater than 300 mA
<b>Replace:</b>	<b>N2801</b> , if getting hot <b>N2903 ,N2900 or N2902</b> , if getting hot
<b>Symptom:</b>	Current draw when powered off
<b>Replace:</b>	<b>N2801</b> , if getting hot <b>N2903 ,N2900 or N2902</b> , if getting hot
<b>Symptom:</b>	Using no current when On/Off key is pressed and will not start.
<b>Replace:</b>	<b>X9801</b> , if damaged      vision check pin B6 - B7
<b>Symptom:</b>	Draws current when On/Off key is pressed, returns to zero
<b>Replace:</b>	<b>L1000, L1003 , L1004 or L2400</b> , if more than 1 $\Omega$ <b>N2401</b>
<b>Symptom:</b>	Other
<b>Replace:</b>	<b>X1300</b> , if damaged      vision check all pins



## Troubleshooting Flow

### 1.7 Charging & Capacity

<b>Symptom:</b>	No or bad Charging from USB
<b>Replace:</b>	<b>X2200</b> , if damaged vision check pin 1 and 5 <b>C2200</b> , if X2200 pin 1 is short circuit to GND <b>X1300</b> , if damaged vision check all pins <b>N1310</b>

<b>Symptom:</b>	Wrong Battery indicator
<b>Replace:</b>	<b>N1302</b>



## Troubleshooting Flow

### 1.8 SIM

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



## Troubleshooting Flow

### 1.9 Camera

<b>Symptom:</b>	Main Camera problems	
<b>Replace:</b>	<b>X7301</b> , if damaged	vision check all pins
	<b>L1002</b> , if more than 1 $\Omega$	
	<b>Z9803, Z9804 or Z9805</b>	

## Troubleshooting Flow

### 1.10 Data Communication

<b>Symptom:</b>	No communication via the USB Connector, charging via USB connector is working
<b>Replace:</b>	<b>X2200</b> , if damaged      vision check pin 2 and 3
<b>Symptom:</b>	Bad Bluetooth ,WLAN and no GPS connection
<b>Replace:</b>	<b>X8402</b> , if damaged <b>X8401</b> , if more than 1 $\Omega$ between term A and C
<b>Symptom:</b>	Bad Bluetooth and WLAN connection
<b>Replace:</b>	<b>Z8001</b> or <b>Z8402</b>
<b>Symptom:</b>	No Bluetooth and / or WLAN connection
<b>Replace</b>	<b>N8102</b> <b>N8101</b> <b>N8100</b> <b>N2800</b>
<b>Symptom:</b>	No GPS connection
<b>Replace:</b>	<b>Z8401</b> , <b>Z8402</b> , <b>Z8403</b> <b>N8400</b> <b>N2800</b>
<b>Symptom:</b>	No or bad HDMI
<b>Replace:</b>	<b>X6501</b> , if damaged      vision check all pins <b>N6502</b> or <b>N6504</b> <b>N6505</b> , <b>N6506</b> or <b>N6507</b>



## Troubleshooting Flow

### 1.11 Memory Stick / Card

<b>Symptom:</b>	Memory stick / Card (micro SD) not detected
<b>Replace:</b>	<b>X4100</b> , if damaged                      vision check pin all pins <b>V4100</b>

## Troubleshooting Flow

### 1.12 Network & Signal

<b>Symptom:</b>	Phone fails to lock on to network during radiated (wireless) Go/ No Go test
<b>Action:</b>	Use RF probe to perform conducted Go / No Go test
<b>Symptom:</b>	Phone passes conducted (RF cable) Go / No Go test but fails radiated (wireless) Go / No Go test
<b>Check:</b>	<b>X2802, X8404, X8405, X8406, X8407</b> and <b>X8408</b> for damage and replace, if necessary <b>X2801</b> for damage and replace, if more than 1 $\Omega$ between A and C term
<b>Replace:</b>	RF Antenna ,Sub PCB or Antenna RF Cable
<b>Action:</b>	Rerun the phone through radiated (wireless) Go / No Go testing
<b>Symptom:</b>	Phone fails conducted (RF probe) Go / No Go test
<b>Action:</b>	Run the calibration routine
<b>Symptom:</b>	Fails conducted (RF probe) Go/No Go test, but passes calibration
<b>Action:</b>	Rerun the phone through Go/No Go testing
<b>Symptom:</b>	Fails any part of the calibration routine
<b>Check:</b>	<b>X2801</b> for damage and replace, if more than 1 $\Omega$ between RF probe and C term or A and C term is short circuit then the probe is inserted.
<b>Replace:</b>	<b>Z2800, N2803</b> or <b>N2800</b> , if GSM Rx fault <b>N2803</b> or <b>N2800</b> , if WCDMA Rx fault <b>V9830, N2801 ,N2803</b> or <b>N2800</b> , if GSM Tx fault <b>N2900 ,N2803</b> or <b>N2800</b> ,if WCDMA Tx band 5 or 8 <b>N2903 ,N2803</b> or <b>N2800</b> ,if WCDMA Tx band 1 fault <b>N2902 ,N2803</b> or <b>N2800</b> ,if WCDMA Tx band 2 fault



## 2 Revision History

Rev.	Date	Changes / Comments
1	2011-07-01	Initial release