



# Installation Instruction, Electrical

Applicable for W380, Z555

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# 1 General

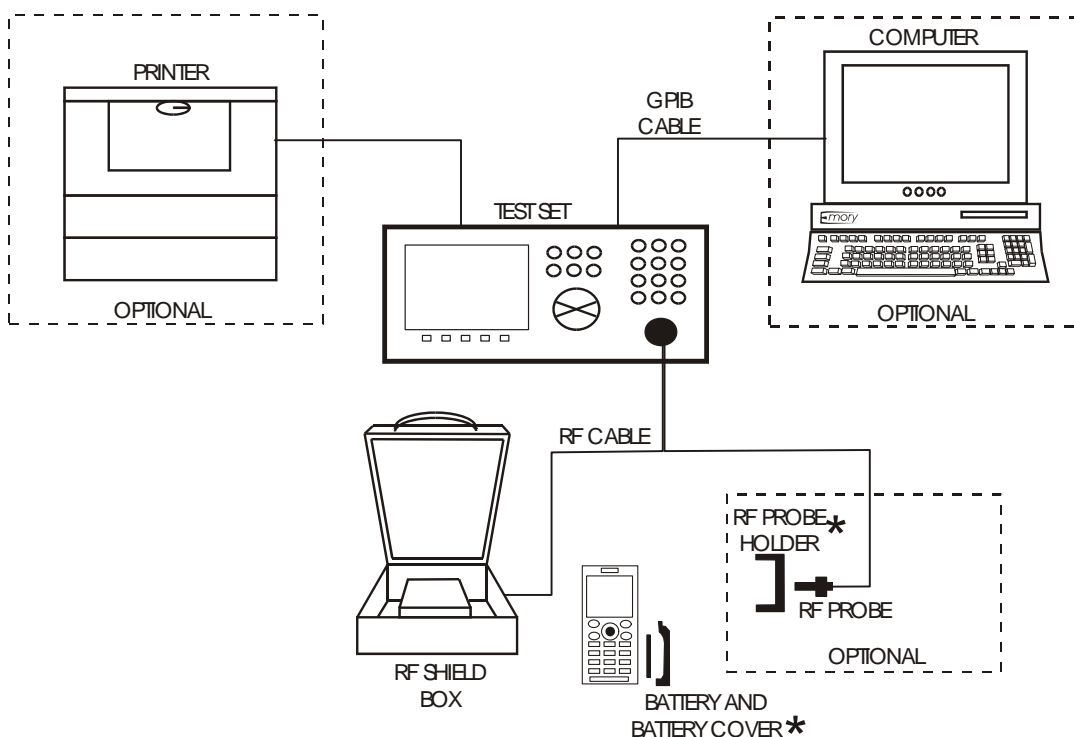
The Electrical Installation Instructions describe the procedures for installing all of the hardware and software needed to perform testing, calibration, and repair activities at an Electrical level for the Sony Ericsson products specified.

## 2 Go/No Go Testing

There are two options for performing a Go No/Go test. One is to use an RF Fixture and the other is to use an antenna coupler together with a shielding box.

### 2.1 Test Set-Up Go/No Go test

All test hardware necessary for this test set up is documented in the Mechanical or Electrical Equipment Lists.



\* The RF Probe Holder and the Battery Cover may not be used for every product. See the Installation Instructions and Test Instructions for details.



## **2.2 Test Set**

A Quad Band GSM 850/900/1800/1900 Test Set approved according to the Electrical Equipment List must be used.

It should be installed according to the Instrument Manufacturer Instructions.

## **2.3 RF Connections Antenna Coupler**

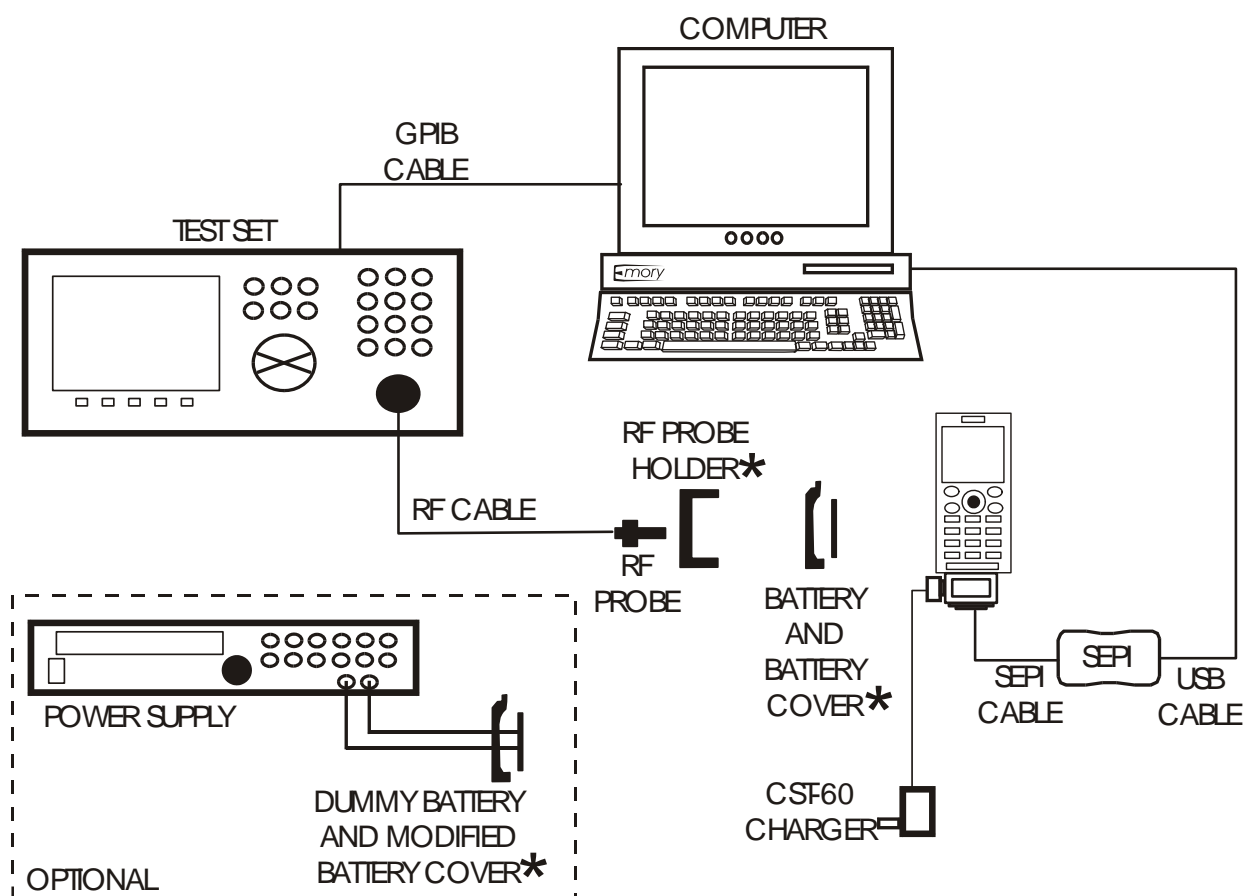
Connect the RF Cable between the RF-port of the Test set and the RF Shield box. The Antenna Coupler should be installed into the RF Shield Box according to manufacturer instructions.

## **2.4 RF Connections Test Fixture (optional)**

Connect the RF-cable between the RF-port of the Test set and the RF Probe. Assemble the RF Probe to the RF-holder according to the information in the Test Instruction Electrical.

## 3 Calibration

### 3.1 Test set up – SERP (only authorized centers)



\* The RF Probe Holder, Battery Cover, and Modified Battery Cover may not be used for every product. See the Installation Instructions and Test Instructions for details.



## **3.2 Test Set**

A Test Set approved according to the Electrical Equipment List must be used. It should be installed according to the Instrument Manufacturer Instructions.

## **3.3 GPIB card and cable**

Use a GPIB card and cable according to the Electrical Equipment List. Use the GPIB cable to connect the GPIB card to the test instrument.

## **3.4 USB Cable**

The A-B Plug-Plug cable is the interface between the computer and the USB programming interface (SEPI). Connect the cable between the USB programming interface and the computer.

## **3.5 Sony Ericsson programming interface – SEPI**

The USB programming interface is delivered with the necessary software and instruction for installation. The USB programming interface (SEPI) should be connected to a USB-port on the computer.

## **3.6 Sony Ericsson programming interface cable**

The cable is the interface between the USB programming interface (SEPI) and the phone. A standard Sony Ericsson Mobile Communication charger, CST-60 must be connected to the programming interface cable.

## **3.7 Phone Power during Calibration**

There are two options for powering the phone during calibration, a fully charged Battery or a Power supply with a Dummy Battery, both are acceptable.

### **3.7.1 Battery**

A fully charged Sony Ericsson battery approved for this phone model must be used. The part number can be found in the Mechanical Equipment List.

### **3.7.2 Power Supply**

A Power Supply according to Electrical Equipment List must be used.

Set the output of the Power Supply as follows

- Voltage: 3.8Vdc
- Current: 2.0Amps

### **3.7.3 Dummy Battery**

A Dummy Battery is to be used together with a power supply to power the phone. Connect the cables from the battery eliminator to the power supply, red cable to positive output terminal and black cable to negative output terminal. There is a 3-position switch on the Dummy Battery that should be set to position "B".

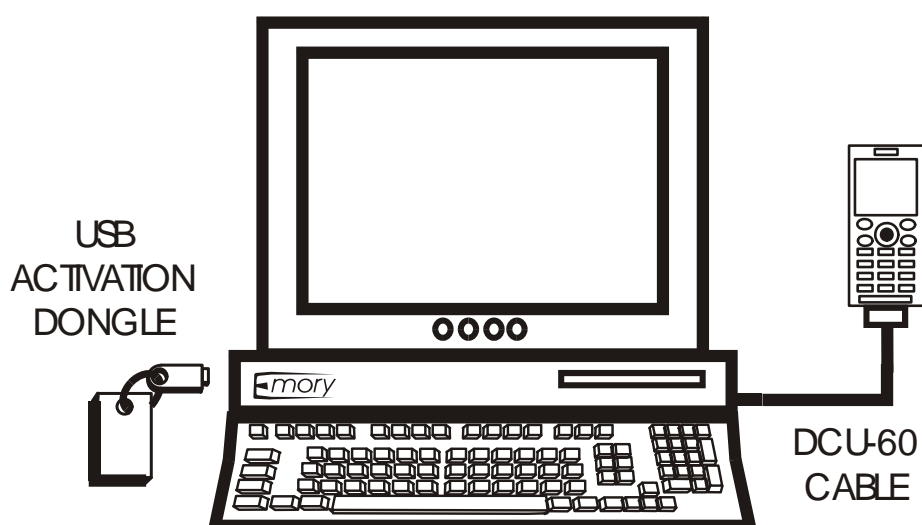
## **3.8 RF Connection**

Connect the RF-cable between the RF-port of the Test set and the RF Probe. Assemble the RF Probe to the RF-holder according to the information in the Test Instruction Electrical.

## 4 Software Loading

### 4.1 Set up

General Test set up to perform SW loading. All necessary hardware for this test set up is documented in the Mechanical or Electrical Equipment list.



### 4.2 Computer

IBM compatible computer is required. The computer should include at least two USB-ports. Refer to Equipment List for minimum requirements.

### 4.3 USB Activation Dongle

A USB Activation Dongle is required for activation in EMMA III. The USB Activation Dongle should be connected to a USB-port on the computer. Refer to the EMMA III Homepage available from CSPN, for installation instructions.

### 4.4 Sony Ericsson programming cable – DCU-60

The cable is the interface between the computer and the phone. The DCU-60 cable should be connected to a USB-port on the computer.



## 5 Software

### 5.1 EMMA III

EMMA III contains all software required to service the product. Installation and user manuals are available in the EMMA III start page.

<http://ma3.extranet.sonyericsson.com/>

### 5.2 SERP Go/No Go Test Script

SERP stands for “**S**ony **E**ricsson **R**epair **P**latform”. It is an application used for testing, calibrating and repairing Sony Ericsson mobile phones.

Download the latest revision of the SERP application from CSPN.

<http://cspn.extranet.sonyericsson.com>

This application is located in the dropdown menu

**Repair Instructions-Electrical/SERP application**

1. Unzip the file and open the file “Release Notes and Installation Guide” for installation instructions.
2. After SERP is installed a file titled “SERPINFO.htm” will be placed on the Windows Desktop. This file contains numerous documents including:
  - SERP Users Manual – This document contains detailed operating and fault reporting instructions.
  - R&S Grid plate for SERP – This document contains an overview and ordering information for the Rhode & Schwarz Grid Plate used with the Rhode & Schwarz coupler. Also there is a list of supported SEMC handsets and mounting positions.
  - SERP Release Notes and Installation Guide – This document contains system requirements, release notes and an Installation Guide.





## 5.3 SERP Calibration (only authorized centers)

Download the latest revision of the SERP application from CSPN.

<http://cspn.extranet.sonyericsson.com>

This application can be found from the dropdown menu

**Repair Instructions-Electrical/SERP application**

1. Unzip the file and open the file "Release Notes and Installation Guide" for installation instructions.
2. Follow the Install instructions to install SERP.

## 5.4 Willtek 420x Go/No-Go Test Script

An approved Sony Ericsson Test Script must be installed in the Test Instrument. The Willtek 420x script can be downloaded from CSPN.

<http://cspn.extranet.sonyericsson.com>

This application is located in the dropdown menu

**Repair Instructions-Electrical/ GO/NO GO Test Spec**

The Space ID number for the 420x test script is 1003-9066 when using the R&S Coupler or the RF Fixture. Install the Test Script according to the Instrument Manufacturer's Instructions.

## 6 Lead-Free Electrical Repair

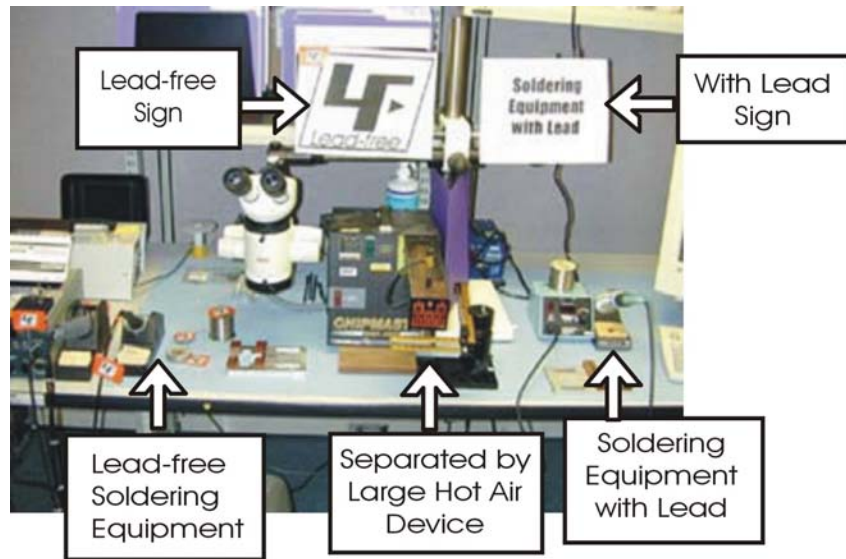
This product is manufactured with lead-free solder and lead-free components. During electrical repair, it is critical to make sure that no lead is introduced into the product. For this reason, certain repair materials and equipment must be designated as lead-free and labelled accordingly. A lead-free work area must be setup that is completely separated from work areas that are used to make leaded repairs. The lead-free work area must also be clearly labelled as shown in the figure below. Certain items must be designated for lead-free work only. Some of the items that need to be clearly labelled in this way are listed in the table below. Note that any item that contacts the solder must be labelled and used for lead-free work only.

Soldering Tips	Wicking Tape	Tip Cleaner (steel wool)
Solder	Tip Tinner	Soldering Iron





Because of cost and space limitations, some repair centers may not be able to assign a full bench to lead-free repairs. In this case, both lead-free and leaded repair setups can share the same bench, but they must be clearly marked with signs and separated by a physical divider. In the figure below, the large hot air device functions as the divider.



## 7 Revision History

Rev.	Date	Changes / Comments
1	2008-02-29	Initial Release