



# Installation Instruction - Electrical

Applicable for Z310

## Contents

<b>1</b>	<b>General</b>	<b>2</b>
<b>2</b>	<b>Go/No Go Testing</b>	<b>2</b>
2.1	Test Set-up Go/No Go test	2
2.2	Test Set	3
2.3	RF Connection Antenna Coupler	3
2.4	RF Connection RF test cable flexible (RF Probe)	3
2.5	Power Supply & Dummy Battery (optional)	3
<b>3</b>	<b>Calibration</b>	<b>4</b>
3.1	Test set up – SERP (only authorized centers)	4
3.2	Test Instrument	4
3.3	GPIO card and cable	5
3.4	RF Cable	5
3.5	RF Probe	5
3.6	Power Supply	5
3.7	Dummy Battery	5
3.8	Sony Ericsson Programming Interface – SEPI	5
3.9	SEPI A1 Cable	5
3.10	USB PC cable	5
<b>4</b>	<b>General Equipment</b>	<b>6</b>
4.1	Test Set up	6
4.2	Computer	7
4.3	Service Card Reader and Service Card	7
4.4	USB Cable – DCU-60	7
4.5	Label Printer (optional)	7
4.6	Infrared Device	7
4.7	Bluetooth Device	7
<b>5</b>	<b>Software</b>	<b>8</b>
5.1	EMMA III	8
5.2	Labelmake II software (optional)	8
5.3	Stand alone Go/No Go scripts	8
5.3.1	Test Scripts for Willtek 4202	8
5.3.2	Test scripts for Yokogawa VC230	8
5.3.3	Test Scripts for Anritsu MT8510B	8
5.4	SERP (only authorized centers)	9
<b>6</b>	<b>Revision History</b>	<b>10</b>



# 1 General

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

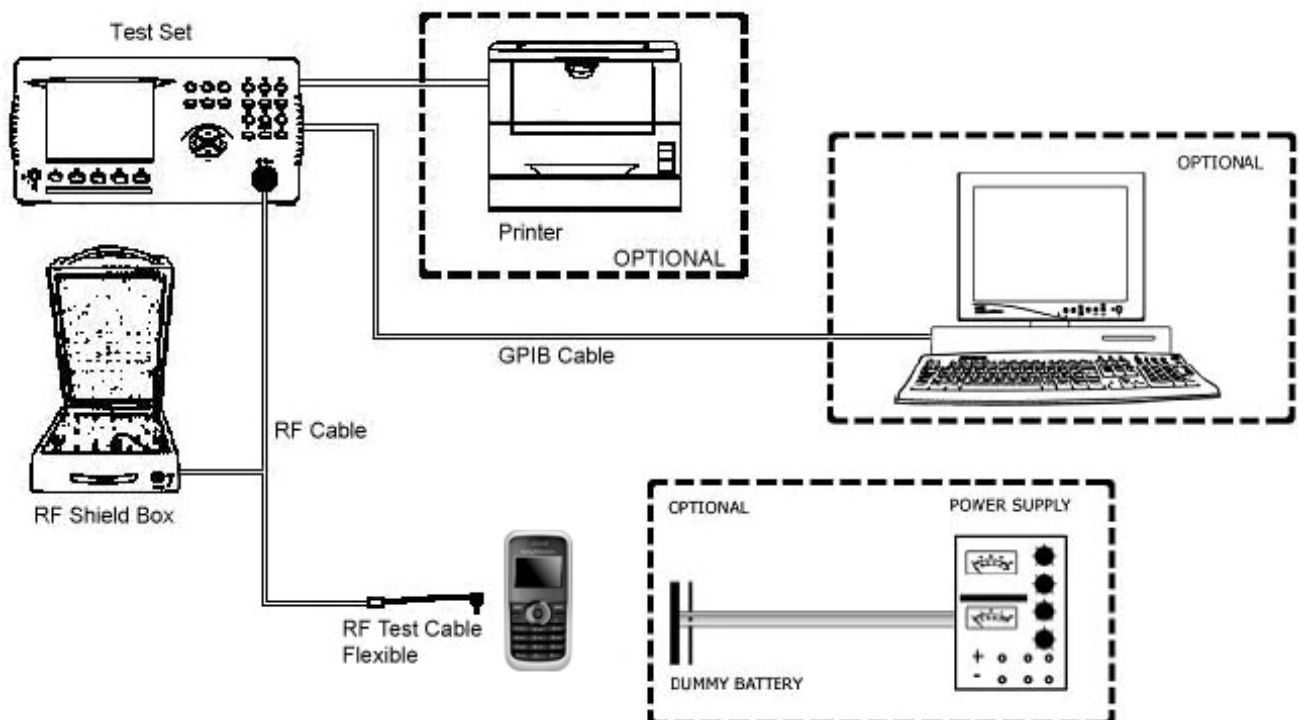
**NOTE!** This product is manufactured with lead-free solder and lead-free components. During electrical repair, it is critical to make sure that no lead is introduced into the product. For this reason, certain repair materials and equipment must be designated as lead-free and labelled accordingly. A lead-free work area must be setup that is completely separated from work areas that are used to make leaded repairs. 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 Equipment List Electrical. Note that any item that contacts the solder must be labelled and used for lead-free work only.

## 2 Go/No Go Testing

There are two options for performing a Go No/Go test. One is to use an RF Probe 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 Electrical Equipment List.





## **2.2 Test Set**

An E-GSM 900/GSM 1800/GSM 1900 Test Set approved according to the Equipment List must be used.

It should be installed according to the Instrument Manufacturer Instructions.

A computer may be installed to the test instrument if applicable.

## **2.3 RF Connection Antenna Coupler**

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

## **2.4 RF Connection RF test cable flexible (RF Probe)**

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

## **2.5 Power Supply & Dummy Battery (optional)**

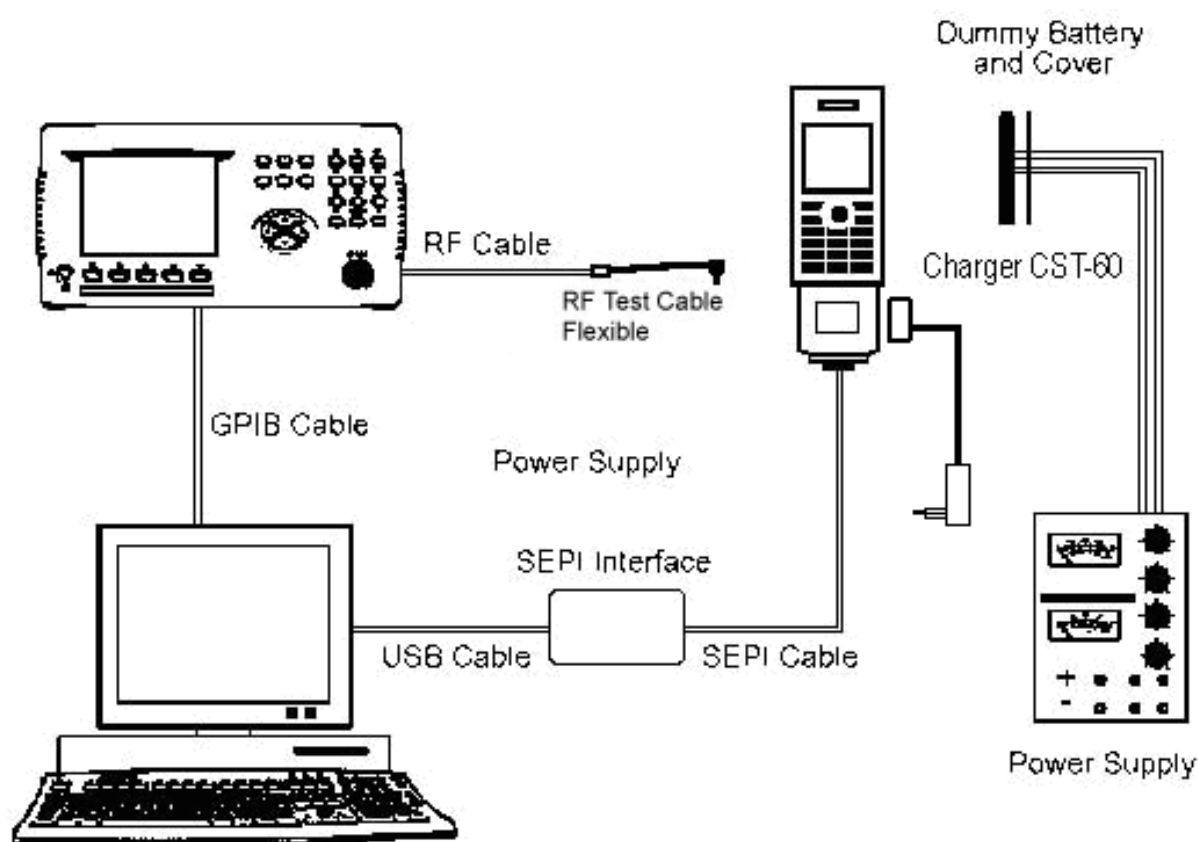
Dummy Battery can be used together with a power supply to power the phone during the test. Connect the cables from the dummy battery to the power supply, red cable to positive output terminal and black cable to negative output terminal.



## 3 Calibration

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

All test hardware necessary for this test set up is documented in the Electrical Equipment and Instrument List.



### 3.2 Test Instrument

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

The test instrument used must be a Sony Ericsson approved instrument with all required software and hardware options installed. Refer to the Equipment List, Electrical for the list of approved test instruments.



### 3.3 GPIB card and cable

Use a GPIB card and GPIB cable according to the Equipment List. Connect the GPIB cable to between the GPIB card and the test instrument.

### 3.4 RF Cable

Connect the RF cable N-Type connector to the RF port of the Test Instrument.

### 3.5 RF Probe

Connect the RF Probe between the RF Cable SMA-type connector and the external antenna of the phone, see Test Instruction, Electrical.

### 3.6 Power Supply

Power Supply according to Instrument List must be used.

### 3.7 Dummy Battery

Dummy Battery is to be used together with a power supply to power the phone during the calibration. Connect the cables from the dummy battery to the power supply, red cable to positive output terminal and black cable to negative output terminal.

### 3.8 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 an USB-port on the computer.

### 3.9 SEPI A1 Cable

The cable is the interface between the USB programming interface (SEPI) and the phone.

**NOTE!** A standard Charger must be connected to the SEPI A1 connector

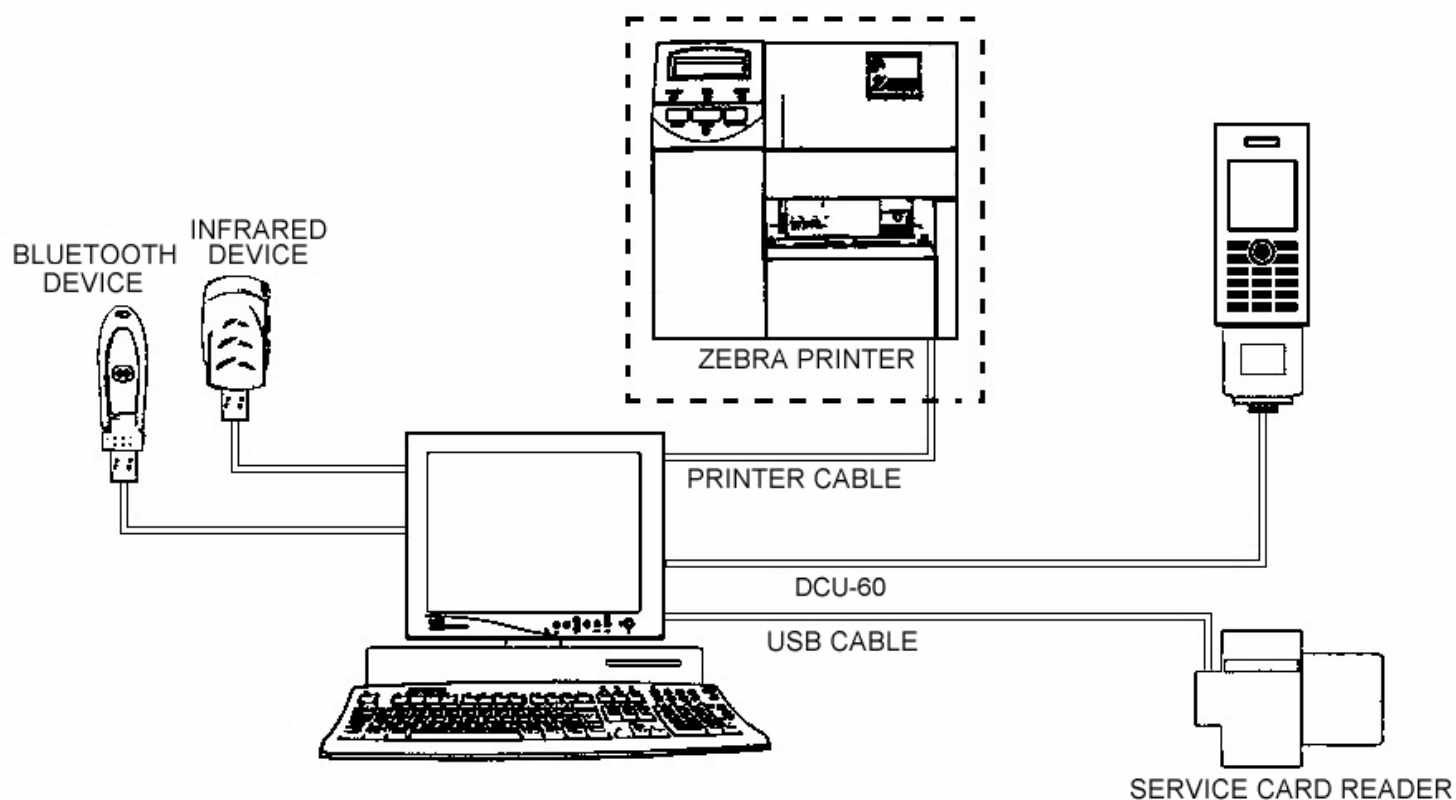
### 3.10 USB PC cable

Connect the A-B USB cable between the computer's USB port and the SEPI box.

## 4 General Equipment

### 4.1 Test Set up

General Test set up to perform SW loading and manual test according to Test Instruction. All necessary hardware for this test set up is documented in the 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 Service Card Reader and Service Card**

The Service Card Reader is delivered with the necessary software and instructions for installation. The Service Card Reader should be connected to an USB-port on the computer.

## **4.4 USB Cable – DCU-60**

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

## **4.5 Label Printer (optional)**

A Zebra printer model 90xi, 90xill or 4000 deluxe shall be used. Connect the printer with a standard RS 232 serial printer cable [refer to the Zebra printer manual] to the serial port on the computer. Read the Zebra installation manual for more information about the installation.

## **4.6 Infrared Device**

RS 232 or USB type infrared adapter may be used. Install according to the manufactures instructions.

## **4.7 Bluetooth Device**

Any Bluetooth device as headset, other Bluetooth phone or other Bluetooth device can be used to verify the Bluetooth function in the phone. Set up the connection according to the chosen equipments manufacturer.

## 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/ma3/>

### 5.2 Labelmake II software (optional)

Download the Labelmake II software from [CSPN](#). Unzip the file and run the setup.exe and follow the instructions. Read the file README.txt under C:\Program Files\Ericsson\Labelmake and follow the instructions. Start the program by selecting Labelmake in your Windows START-menu.

This product is using labels from the EU-database. To add the latest Database from [CSPN](#), download the latest file and run the Setup.exe and follow the instructions.

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

### 5.3 Stand alone Go/No Go scripts

An approved Sony Ericsson Test Script must be installed in the Test Instrument.

#### 5.3.1 Test Scripts for Willtek 4202

To be added later.

#### 5.3.2 Test scripts for Yokogawa VC230

To be added later.

#### 5.3.3 Test Scripts for Anritsu MT8510B

To be added later.



## 5.4 SERP (only authorized centers)

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. Refer to the Equipment List Electrical for SERP approved test instruments.

1. Download the latest revision of the SERP application from CSPN (**Repair Instructions/Standard/SERP Install Package**).
2. Unzip the file and open the file “SERP\_Installation.doc” for installation instructions.
3. 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 system requirements, release notes, fault reporting instructions, supported test instruments, installation procedures and detailed operating instructions.
  - SERP Troubleshooting Guide – This document contains a few troubleshooting steps that should be reviewed before reporting issues to Sony Ericsson.
  - SERP Trouble Report Form – This form should be filled out when reporting SERP issues to the regional support team.

Download the latest revision of SERP application from [CSPN](http://cspn.extranet.sonyericsson.com). This application is located under **Repair Instructions / Standard / SERP Install package**

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

Unzip the file and open the Installation instructions.  
Follow the Install instructions to install SERP.



## 6 Revision History

Rev.	Date	Changes / Comments
A	2007-02-14	First release
B	2007-02-18	Due to system problem. No changes made on content.
C	2007-02-27	SERP chapter updated.