



Sony Ericsson

Test & Calibration

- electrical -



X10i, X10a, SO-01B

CONTENTS

1	Go/NoGo Testing	3
1.1	Antenna Coupler	3
1.2	Direct Line.....	4
1.3	Attenuation Factors	5
1.3.1	Loss Values – Antenna Coupler	5
1.3.2	Loss Values – Direct Line	6
2	Revision History	7

1 Go/NoGo Testing

This Go/NoGo testing can be carried out in two alternative ways, with an:

- Antenna Coupler
- Direct Line

For more information on Antenna Coupler and Direct Line testing, refer to 1220-1336: Generic Repair Manual – electrical, section ‘Setup Go/NoGo Test’!

For part no’s on the equipment below, refer to the ‘Tools Catalogue/Matrix’!

1.1 Antenna Coupler

The following equipment has to be used:

- Rohde & Schwartz RF Shield Package
 - Rohde & Schwartz RF Shield Box
 - Rohde & Schwartz RF Coupler
 - Grid Positioning Holder
- RF Test Cable Flexible 1M
- RF Adapter for RF Shield Box

GSM-850/900/1800/1900

WCDMA-850/900/1700/1900/2100

Put the grid positioning holder with its reference point in position **D13** and place the phone as shown in the adjacent picture.



Go/NoGo Testing

1.2 Direct Line

The following equipment has to be used:

- RF Test Cable Flexible 1M
- RF Probe

Connect the RF Probe as shown in the adjacent picture.

To get access to the RF connector on the PBA, refer to 1230-2324: X10 Working Instructions, section 3.1!



Go/NoGo Testing

Follow the directions stated in 'Go/NoGo Test Script Parameters' to be found in 1220-1336: Generic Repair Manual – electrical, together with the 'Attenuation Factors' below!

This phone is available in two versions, X10a/SO-01B and X10i, including the following bands:

X10a/SO-01B:

GSM-850/900/1800/1900

WCDMA-850/1900/2100

X10i:

GSM-850/900/1800/1900

WCDMA-900/1700/2100



1.3 Attenuation Factors

The attenuation values listed below in 1.3.1 and 1.3.2 are valid only when the equipment listed on the previous pages is being used!

1.3.1 Loss Values – Antenna Coupler

Band	Channel	Attenuation			
		X10a/SO-01B		X10i	
		Rx	Tx	Rx	Tx
GSM 850	Low	4.00	11.85	4.00	11.85
	Mid	5.00	8.33	5.00	8.33
	High	5.00	6.62	5.00	6.62
GSM 900	Low	7.00	5.54	7.00	5.54
	Mid	10.00	6.08	10.00	6.08
	High	8.00	6.14	8.00	6.14
GSM 1800	Low	9.00	13.83	9.00	13.83
	Mid	10.00	11.44	10.00	11.44
	High	10.00	10.41	10.00	10.41
GSM 1900	Low	9.00	11.25	9.00	11.25
	Mid	10.00	10.75	10.00	10.75
	High	12.00	9.62	12.00	9.62
WCDMA 850	Low	6.50	11.09	-	-
	Mid	6.00	9.95	-	-
	High	6.00	8.46	-	-
WCDMA 900	Low	-	-	7.00	3.75
	Mid	-	-	8.50	3.45
	High	-	-	9.50	3.23
WCDMA 1700	Low	-	-	6.50	13.32
	Mid	-	-	7.50	12.19
	High	-	-	6.50	10.58
WCDMA 1900	Low	9.00	9.66	-	-
	Mid	8.00	10.63	-	-
	High	9.50	10.61	-	-
WCDMA 2100	Low	5.50	7.25	5.50	7.25
	Mid	7.00	7.34	7.00	7.34
	High	6.00	7.98	6.00	7.98



Go/NoGo Testing: Attenuation Factors

1.3.2 Loss Values – Direct Line

Band	Channel	Attenuation	
		Rx	Tx
GSM 850	All	0.8	0.8
GSM 900	All	0.8	0.8
GSM 1800	All	1.3	1.3
GSM 1900	All	1.3	1.3
WCDMA 850	All	1.3	1.3
WCMA 900	All	0.8	0.8
WCDMA 1700	All	1.3	1.3
WCDMA 1900	All	1.5	1.5
WCDMA 2100	All	1.5	1.5



2 Revision History

Rev.	Date	Changes / Comments
1	2010-May-11	Initial release