Service Bulletin

Date	Ref. No.	Model	TD
07.02.97	IP00297	CM-DX1000	
Subject			IRIS
Disassembly of Set			

SYMPTOM

Disassembling the CM-DX1000 may lead to damage of the Upper or Lower Case Shell due to incorrect handling.

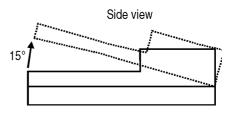
CAUSE

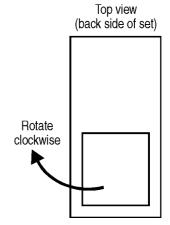
The factory assembly of the CM-DX1000 cosmetics is rather tight, and on the upper side, both major parts are held together by claws.

SOLUTION

Apply the following procedure:

- · Remove the Antenna.
- Remove the Battery Cover and the Battery.
- Remove the SIM Card Holder.
- Remove four screws in the Battery Compartment.
- Hold the set in your hand with the display side in the palm of your hand.
- Take the Lower Case Shell at its bottom part (i.e. bottom of the Battery Compartment) and lift this part to an angle of approximately 15°.
- Now rotate the Lower Case Shell clockwise. You will meet some resistance. A loud click will be audible (releasing of the claws) and the Lower Case Shell will be correctly loosened.







Date	Ref. No.	Model	TD
28.03.97	IP00397	CM-DX1000	
Subject			IRIS
Part number info: New Software			

A new software is available for CM-DX1000. Following are the changes in comparison with previous software:

- The Phone Book function now displays the remaining free entries. Texts and graphics have been added. Indication by selecting an entry (edit mode) and double pressing the "i" key.
- Update of PLMN lists according to MoU SE.13 (20.06.96). The PLMN list is the list of active network operators.
- In case of SMS-CB (Short Message Service, Cell Broadcast) the information display is updated after releasing a call. It is used in some networks (mainly UK and Netherlands).
- Change in the comparison of the IMSI to the SIM. Different calculation now provides increased safety against wrong paging answers in case of IMSI paging.

Description	Part number	Languages	
G1	9-948-000-03	German, English, French, Italian, Dutch, Turkish	
G2	9-948-000-02	English, Danish, Swedish, Norwegian, Finnish, Dutch	
G3	9-948-000-01	English, Spanish, Portuguese, Hungarian, Greek, Zhong Wen Pin Vin (Chinese)	

NOTES

- The software is dated 13.11.96.
- A new software is always released under the same part number as the previous software. In such case, the stock is automatically updated.

Service Bulletin

Date	Ref. No.	Model	TD
30.05.97	IP00997	CM-DX1000	
Subject			IRIS
Standby Time Abnormally Short			1117

SYMPTOM

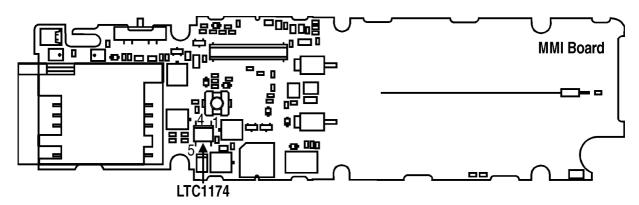
The standby time is abnormally short so that the impression may arise that the battery is defective, or the battery is never totally charged.

CAUSE

Defective IC LTC1147 on the MMI Board.

SOLUTION

Replace IC LTC1147 (8-759-336-22). The part is accessible on the MMI Board after removing the Lower Case Shell and the RF Unit.

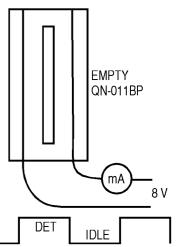


CHECKING METHOD 1

- Either make a dummy battery or connect the battery terminal of the CM-DX1000 to the power supply.
- Supply 8V.
- · Remove the SIM card and power on.
- Check the current using a milliamperemeter. The current should toggle with a sequence of about 1 ~ 2 seconds between detection mode and idle mode.
- During the detection mode period the current should be 40 ~ 220 mA.
- During the idle mode period the current should be 9 ~ 16 mA. A higher value indicates that the LTC1147 IC is defective.



Using a voltmeter, measure the voltage between GND and pin 4 or 5 of IC LTC1174 while the unit is powered on. The voltage should range between 1.24 \sim 1.28V. A voltage of >1.3V indicates that the LTC1147 IC is defective.





Date 09.05.96	Ref. No.	Model CM-DX1000	TD
	11 0 1030	CIN-DA 1000	IRIS
,	Subject Part number info: New Software		

A new operating software has been issued for CM-DX1000. This software should be considered mandatory in view of the following improvements:

- Improved power management under weak network conditions (battery time when network connection is lost will not decrease quickly anymore).
- Improved hopping timing (when frequency hopping is used, connections in the past were sometimes lost due to critical timing).

Apart from these major improvements, minor points have been changed which are mainly not noticeable to users.

Description	Part number	Languages	
G1	9-948-000-03	German, English, French, Italian, Dutch, Turkish	
G2	9-948-000-02	English, Danish, Swedish, Norwegian, Finnish, Dutch	
G3	9-948-000-01	English, Spanish, Portuguese, Hungarian, Greek, Zhong Wen Pin Vin (Chinese)	



Date	Ref. No.	Model	TD
31.05.96	IP01296	CM-DX1000	
Subject			IRIS
Phonelocking Detection			

With the latest software version dated 23.02.96 – announced in Service Bulletin IP01096 – it is possible to detect whether a set is phonelocked. The following procedure allows to find out whether a set is phonelocked.

- Make sure no SIM card is inserted.
- Power on.
- Dial *#06#. The set now shows the IMEI number (electronic identification).
- Push the softkey left. The set now shows the software date.
- Push the softkey left again, or, after performing the previous step, wait for approximately 10 s. The set now shows if it is locked or not. There are two possible locks, but for the customer they appear similar. Unlocking is similar.

NOTE

Phonelocking refers to a hardware lock of the set, not to any SIM card locking.



Date	Ref. No.	Model	TD
06.08.97	IP01297	CM-DX1000	
Subject			IRIS
Spare Parts Availability			

More spare parts have been available for CM-DX1000 service. All currently available parts are noted in **Service Manual Supplement-1** (9-948-417-10).

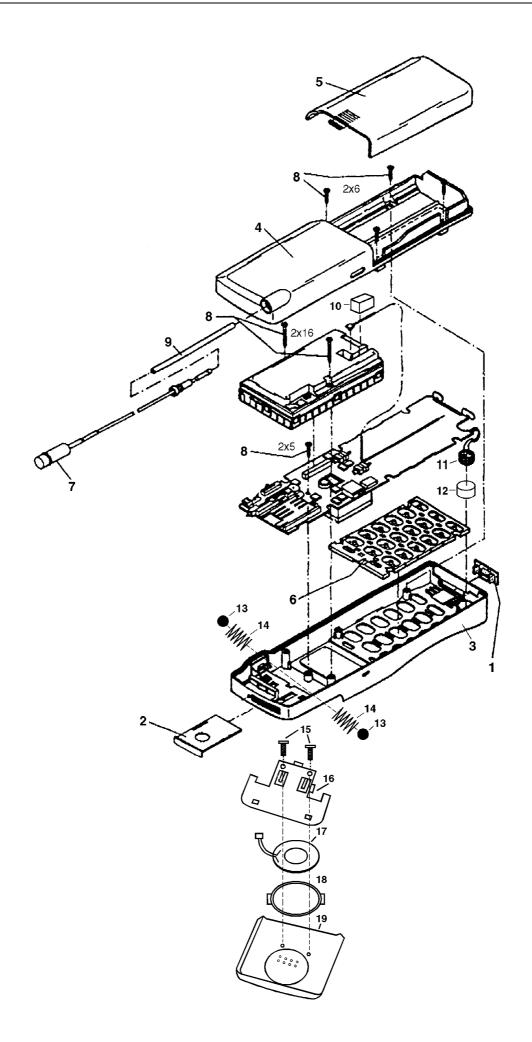


Date	Ref. No.	Model	IP
31.08.95	IP01395	CM-DX1000	
Subject			IRIS
Correction of Exploded View and Parts List			

Add the following parts to the exploded view and the parts list.

Ref. No.	Part number	Description	
3	X-3369-697-1	Upper Case Shell without Earphone	
10	3-923-081-01	Spacer (B)	
11	1-542-256-11	Microphone	
12	3-920-741-01	Microphone Holder	
13	7-671-155-01	Steel Ball (3.0)	
14	3-920-743-01	Coil Spring	
15	3-920-748-01	Torx Screw (1.7x6)	
16	3-920-737-01	Receiver Case (Lower)	
17	1-504-764-11	Speaker	
18	3-920-740-01	Receiver Holder	
19	X-3369-699-1	Receiver Case Subassy	
Accessori	Accessories		
	S-2000-001-0	Instruction Manual (English)	
	S-2000-002-0	Instruction Manual (French, Dutch)	
	S-2000-003-0	Instruction Manual (German, Italian)	
	S-2000-004-0	Instruction Manual (Norwegian, Swedish)	
	S-2000-005-0	Instruction Manual (Spanish, Portuguese)	
	S-2000-006-0	Instruction Manual (Danish, Finnish)	
	S-2000-007-0	Instruction Manual (Greek, Hungarian)	
	S-2000-008-0 Instruction Manual (English, Turkish)		
Jigs & Too	ols		
	S-1974-001-0	Antenna Removal Tool	

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Date	Ref. No.	Model	PD
18.09.95	IP01495	CM-DX1000	
Subject			IRIS
Part number info: Torx Screw Set			

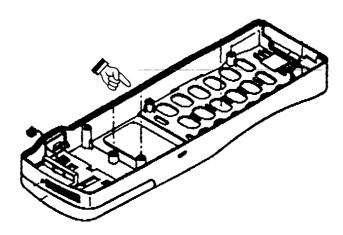
Contrary to the information of the Service Manual, the Torx Screws (#8) are not supplied as a set. Add the part numbers for the individual screws to the Service Manual as follows.

Description	Part number
Torx Screw 2x18 (1 piece)	3-920-766-01
Torx Screw 2x6 (1 piece)	3-920-764-01
Torx Screw 2x5 (1 piece)	3-920-749-01



Date 14.08.96	Ref. No. IP01496	Model CM-DX1000	TD
Subject Part numb	er info: Uppe	Case Shell	IRIS

The Upper Case Shell including Earphone is now available as part number A-0602-116-A.



Service Bulletin

Date	Ref. No.	Model	TD
29.09.95	IP01595	CM-DX1000	
Subject		IRIS	
Background Noise		1542	

SYMPTOM

Constant background noise.

CAUSE

Resonance between the Speaker and the Receiver Case.

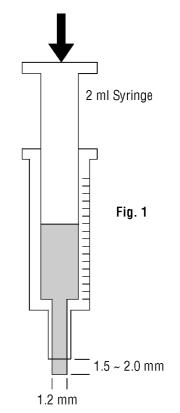
SOLUTION

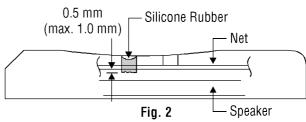
Modify the Receiver Case (Earpiece Pop-up) by filling six of the eight holes with silicone rubber.

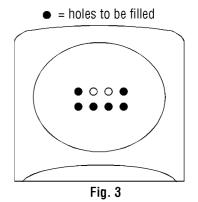
Carefully follow the procedure outlined below to obtain an acceptable result.

- Prepare a 2 ml Syringe filled with Black RTV Silicone Rubber. The syringe to use is a medical type with an opening diameter of approx. 1.2 mm.
- Confirm that the Earpiece is clean and free from dust, fingerprints, etc.
- Apply pressure to the syringe until a small amount of silicone comes out, approx. 1.5 to 2 mm of silicone as shown in Figure 1. This amount is sufficient to fill one hole. Hold the syringe vertical to the hole to be filled and make certain that all of the silicone is pushed inside the hole. The amount of silicone used to fill the hole is critical: if too much is used, the silicone will penetrate the speaker net and might touch the speaker (Figure 2). Repeat the process for all of the six holes indicated in Figure 3.
- Wipe away any excess of silicone from the Earpiece immediately after filling all the holes. Use a clean nonfluffing cloth. Wipe in the opposite direction of the two remaining holes and verify that these stay clear from silicone. A smooth finish is obtained when the cloth is slightly moistened (not wet!).
- The silicone hardens within 15 to 20 minutes.

<u>Description</u>	Part number
Set of 5 Syringes (2 ml)	S-2026-001-0
Black RTV Silicone 732 (90 ml)	S-2026-002-0









Date	Ref. No.	Model	TD
07.11.97	IP01597	CMD-X1000, CMD-Z1	
Subject			IRIS
Part number info: AC Adaptor			

The correct part numbers for the AC Adaptors of these models are listed below.

Model	Description	Part number
CMD-X1000 (AEP)	AC Adaptor	1-473-004-12
CMD-Z1 (AEP)	QN-011AC	
CMD-X1000 (UK)	AC Adaptor	1-473-005-12
CMD-Z1 (UK)	QN-012AC	

Service Bulletin

Date 31.10.95	Ref. No. IP01695	Model CM-DX1000	TD
Subject Poor Rece	ption / Loss o	f Network Connection	IRIS 1223

SYMPTOM

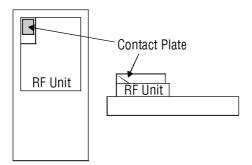
- Loss of network connection.
- No initial connection to network.
- Dropouts during connection.
- Short battery lifetime (due to constant network search).
- Low RF readout in monitor mode.

POSSIBLE CAUSE

Poor or no connection between antenna and RF unit.

SOLUTION

Check the position of the contact plate on the RF unit. The plate should be correctly soldered and should be pointing upwards.



NOTE

The above mentioned symptoms may all be provoked by other failures, too, which are not necessarily due to the set itself. Further checking and eventual repair may still be required.



Date	Ref. No.	Model	TD
06.12.95	IP02195	CM-D200, CM-DX1000	
Subject			IRIS
Part number info: New Software			

New operating software has been issued for both CM-D200 and CM-DX1000 G.S.M. sets.

The software includes several minor improvement on the operation as well as an extension on the availability of different languages.

For both CM-D200 and CM-DX1000, three different software EPROM's are available. **Note that the only difference between these EPROM's is the languages they contain.** The rest of the software is identical.

CM-D200

Description	Part number	Languages
A-100	9-948-000-04	German, English, French, Italian, Spanish, Portuguese, Dutch, Greek
A-200	9-948-000-05	German, English, Danish, Swedish, Norwegian, Finnish, Hungarian, Turkish
A-300	9-948-000-06	German, English, Danish, Swedish, Norwegian, Finnish, Turkish, Zhong Wen Pin Vin (Chinese)

CM-DX1000

Description	Part number	Languages
A-900	9-948-000-03	German, English, French, Italian, Dutch, Turkish
A-902	9-948-000-02	English, Danish, Swedish, Norwegian, Finnish, Dutch
A-903	9-948-000-01	English, Spanish, Portuguese, Hungarian, Greek, Zhong Wen Pin Vin (Chinese)



Date	Ref. No.	Model	TD
18.10.96	IP02696	CM-DX1000	
Subject		IRIS	
Part number info: Ringer			

The Ringer has been made available under part number 1-759-063-11.

NOTES

- When soldering the Ringer, care should be taken about the correct positioning, i.e. the Ringer's output should face the hole in the Upper Cosmetic correctly. Careless positioning may decrease the ringer level by several decibels.
- When the Ringer is not only soldered but also glued to the PCB, the ringer level will decrease due to the rigid contact between the Ringer and the PCB.



Date	Ref. No.	Model	TD
18.10.96	IP02796	CM-DX1000	
Subject			IRIS
Part number info: New Software			

A new operating software has been issued for CM-DX1000. The main difference with the former software involves the use of "Cell Broadcast" in the Netherlands.

"Cell Broadcast" is a GSM feature which allows service providers to send additional information concerning the network, pricing information, weather information, traffic information, etc.

The CM-DX1000 supports basic "Cell Broadcast" functions, but as there is a wide variety of possibilities, service providers tend to provide these possibilities at random, depending on their marketing plans. As a result, it is not possible to guarantee at all moments the full support of all these features in our sets.

Description	Part number	Languages
G1	9-948-000-03	German, English, French, Italian, Dutch, Turkish
G2	9-948-000-02	English, Danish, Swedish, Norwegian, Finnish, Dutch
G3	9-948-000-01	English, Spanish, Portuguese, Hungarian, Greek, Zhong Wen Pin Vin (Chinese)

Note that the part numbers for software upgrades remain unchanged. Whenever a new software is issued, the old stock is automatically erased and updated.



Date	Ref. No.	Model	TD
20.12.96	IP03096	CM-DX1000	
Subject			
New Antenna			

A new Antenna (9-948-003-84) has been used for CM-DX1000 approximately since the August 1996 production.

- There is 100% mechanical compatibility between the old and the new antenna.
- The performance of the new antenna has been slightly improved, mostly in the antenna down condition, i.e. when the user keeps the antenna down inside the set.
- Both the new and the old antenna can be mounted on any CM-DX1000 set.
- The old antenna can still be obtained as long as it is available. When the supply stops, the new antenna will be delivered as the replacement.



Date	Ref. No.	Model	TD	
20.12.96	IP03196	CM-DX1000, QN-011BP		
Subject				
Incorrect Battery Label				

As an operational improvement, the capacity of the QN-011BP battery was increased from 1200mAh to 1350mAh earlier this year. The labelling, however, on the first lots of the improved batteries was not changed. As a result, confusion may arise about the correct battery capacity.

A manufacturing number is stamped on the bottom side of the battery which consists of three digits: year, month, and lot number.

- All the batteries with 1200mAh capacity have a lot number below 63A.
- All the batteries with 1350mAh capacity, but incorrectly labelled 1200mAh, have a lot number ranging from 63A to 69A.
- All the batteries with 1350mAh capacity and correct label have a lot number higher than 69A.

Correct label stickers can be obtained through the usual marketing channels.

Service Bulletin

Date	Ref. No.	Model	TD
23.12.96	IP03296	CM-DX1000	
Subject			
Flash Programmer			

SYMPTOM

After installing the software upgrade, the set will not work.

CAUSE

New ICs have been used during the production of CM-DX1000. As a result, the Flash Programmer used for software updating needs new operating software.

SOLUTION

A new **EEPROM** (**9-948-004-01**) needs to be mounted in the Flash Programmer. Please follow the instructions listed below very carefully and make sure proper antistatic countermeasures are taken. Note that this new operating software is fully backward compatible. Older GSM units can still be upgraded with this new operating software.

PROCEDURE

- Remove six screws on the top and four screws at the bottom of the Programmer Box.
- · Lift the top housing.
- The EEPROMs are located on the lower PCB.
- DO NOT ATTEMPT TO DISCONNECT BOTH PCBs AS THE USED CONNECTORS HAVE EXTREMELY FRAGILE PINS!!
- · Move the top PCB gently to the side.
- The EEPROM is mounted on the bottom board in sockets. There are two EEPROMs mounted. It is the left one
 that needs to be replaced.
- Using an IC Extractor (J-6035-070-A), take out the EEPROM.
- Gently insert the new EEPROM. Be sure to mount it correctly.
- The correct matching is shown on the stickers of the EEPROMs.

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