



# TEST REPORT

Ref. Report No.

99-341-050-1

*This test report only responds to the tested sample and shall not be reproduced except*

**Name and address of the applicant**

Belco International Co., Ltd.  
1001-11, Doksan 1-dong, Kumcheon-ku, Seoul,  
Korea 153-011

**Standard / Test regulation**

FCC Part 15, Subpart C

**Test result**

Pass

Incoming date : October 20, 1999

Test date : October 27 ~ November 17, 1999

**Test item(s) ;**

Cordless Headset Telephone System  
(Transmitter Portion of Base System)

**Model/type ref. ;**

CT10

**Manufacturer ;**

Belco International Co., Ltd.

**Additional information ;**

-Required Authorization : Certification  
-FCC ID. : NYCBE-CT10  
-Note : Test report(verification) on receiver  
portion of this unit is issued on Ref. Report No.  
99-341-050-2.

Issue date : November 22, 1999

*in full without written approval of the the Korea Testing Laboratory.*

Tested and reported by

Reviewed by

*S. K. Seol*

Soun-Kweon Seol, Senior Engineer

*S. J. Kim*

Seok-Jin Kim, EMC Team Leader

# KOREA TESTING LABORATORY

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**. GENERAL INFORMATION**

1. Grantee Name and : Belco International Co., Ltd.  
Mailing Address 1001-11, Doksan 1-dong, Kumcheon-ku, Seoul  
Korea 153-011

2. Manufacturer's Name and : Belco International Co., Ltd  
Mailing Address 1001-11, Doksan 1-dong, Kumcheon-ku, Seoul  
Korea 153-011

3. Equipment Descriptions

3.1 Operating Frequency : 902.800 MHz ~ 904.750 MHz (40 Channel 50KHz Spacing)  
3.2 Type of Emission : Frequency Modulation  
3.3 Power Supply : DC 9V (AC Adapter)  
3.4 Additional Information ;  
- PLL Synthesizer : RU0902B14KRB(SAMSUNG)

4. Rules and Regulations : FCC Part 15, Subpart C

5. Measuring Procedure : ANSI C63.4-1992

6. Place of Measurement : Absorber-lined room(3-Meter) of KTL

7. Date of Measurement

7.1 Conducted Emission : November 17, 1999  
7.2 Radiated Emission : November 15, 1999

**. GENERAL REQUIREMENTS OF THE EUT**

## 1. Labelling Requirement (Section 15.19 and Section 15.214)

This device complies with Part 15 of the FCC Rules.  
Operation is subject to following two condition :  
this device may not cause harmful interference, and (2) this device must accept any interference received,  
including interference that may cause undesired operation.

Privacy of communication may not be ensured when using this phone.

1.1 Location on Enclosure : Bottom side

1.2 How Applied : By Ink-printing on Adhesive Label

## 2. Information to User (Section 15.21)

The following or similar statements were provided in the manual for user instruction.  
Please refer page 18 of the attached manual for details.

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## 3. Special Accessories (Section 15.27)

3.1 Were the special Accessories provided? [ ] yes, [ x ] no

3.2 If yes, details for the special accessories are as follows :

3.3 If yes, were the appropriate instructions provided on the first page of the text concerned with the device?

[ ] yes, [ ] no

3.4 Are these accessories provided of the type which can be readily obtained from multiple retail outlets ?

[ ] yes, [ ] no

And therefore does the manual specify what additional components or accessories are required to used in order to comply with the Rules?

[ ] yes, [ ] no

## 4. Digital Security Code (Section 15.214)

4.1 Was a circuitry for digital security code provided in the cordless telephone system ?

[ x ] yes, [ ] no

4.2 If yes, refer to the attached statement on the means and procedures used to achieve the required protection.

### **. CONDUCTED EMISSION MEASUREMENT (Section 15.207)**

#### **1. Test Procedure**

The base station(EUT) is designed to transmit on one of 40 channels in the band 902.800 to 904.750MHz. Therefore measurements were performed with the equipment operating on three frequencies, which were the top(CH40), middle(CH20), and bottom(CH1) in the band, as per Section 15.31(m).

Conducted emission measurements on the EUT were performed by "AC Power Line Conducted Emissions Testing" procedure as per ANSI C63.4. The EUT was set up on a wooden table 0.8 meters height, 1.0 by 1.5 meters in size, placed in the shielded enclosed with a side of wall of which constituted a vertical conducting surface of 2.2m X 3.1m in size to maintain 40Cm from the rear of EUT

2 LISN's(Line Impedance Stabilization Network, EMCO, 3825/2, 50ohm/50uH) were installed and electrically bonded to the conducting ground plane. The EUT was connected to one LISN.

One of two 50ohm output terminals of the LISN was connected to the Spectrum Analyzer(HP, 8566B, 10kHz to 22GHz) with the Quasi-Peak Adapter (HP, 85650A, 10kHz to 1.0GHz) and the other was terminated in 50 ohms. Measurements were again performed after interchanging such a connection oppositely.

The frequency range from 450kHz to 30MHz was examined and the peak values that are within 6dB of the limit would be compared to quasi-peak values using the Quasi-Peak instrument (ROHDE & SCHWARZ, ESH3, 9kHz to 30MHz : Detector Function CISPR Quasi-Peak) or HP Quasi-Peak adapter(85650A, 10kHz to 1.0GHz)

The voltage developed across the 50ohms port in LISN was measured by the Spectrum Analyzer and graphed by the Plotter(HP, 7470A). The 6dB bandwidth of the Spectrum Analyzer and Quasi-Peak Adapter was set to 9kHz with no post detector video filter.

The position of connecting cables and antenna of the EUT was changed to find the worst case configuration during measurements. The maximum emission level from the EUT occurred in such configuration as shown in the following photograph.

## 2. Photograph for the worst case configuration



## 3. Sample Calculation

The emission level measured in decibels above one microvolt (dB  $\mu$ ) was converted into microvolt (  $\mu$  ) as shown in following sample calculation.

For example :

Measured Value at	28.29MHz	25.1dB
+ Cable Losses *		0.0 dB
<hr/>		
= Conducted Emission		25.1dB $\mu$ /m
		( = 18.0 $\mu$ /m )

\* In case of RG214/ RF cable 15Ft, the loss is about 0.17dB at the frequency of 30MHz which is negligible.



