

# TEST REPORT

Ref. Report No.

99-341-060-1

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

Name and address of the applicant

TCL Communication Int'l Ltd.  
Unit 501, 5/F, TCL Tower, 8 Tai Chung Road, Tsuen Wan,  
N.T., Hong Kong

Standard / Test regulation

FCC Part 15, Subpart C

Test result

Pass

**Incoming date : December 6, 1999**

**Test date : December 24 ~ 28, 1999**

**Test item(s) ;**

Cordless Headset Telephone System  
(Transmitter Portion of Base System)

**Model/type ref. ;**

TL603-LD

**Manufacturer ;**

TCL Communication Equipment Share Co., Ltd.

**Additional information ;**

-Required Authorization :Certification  
-FCC ID. : OUZTL603LD  
-Note : Test report(verification) on receiver  
portion of this unit is issued on Ref.Report No.  
99-341-060-2.

**Issue date : January 17, 2000**

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

**Tested and reported by**



Soun-Kweon Seol , Senior Engineer

**Reviewed by**



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**KOREA TESTING  
LABORATORY**

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. GENERAL INFORMATION

1. Grantee Name and Mailing Address : TCL Communication Int'l Ltd.  
Unit 501, 5/F, TCL Tower, 8 Tai Chung Road, Tsuen Wan, N.T.,  
Hong Kong

2. Manufacturer's Name and Mailing Address : TCL Communication Equipment Share Co., Ltd  
TCL Industrial Building, Da Ling Road, Shang Pai, Long Fong, Huizhou,  
Guangdong, China 516001

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 : RU0902B18HKB(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 : December 28, 1999  
7.2 Radiated Emission : December 24~28, 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 2 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,  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 be 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 ?

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 ( ) as shown in following sample calculation.

For example :

|                           |           |
|---------------------------|-----------|
| Measured Value at 0.65MHz | 24.2dB    |
| + Cable Losses *          | 0.0 dB    |
| <hr/>                     |           |
| = Conducted Emission      | 24.2dB /m |
| ( = 16.2 /m )             |           |

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

## 4. Measurement Data

- Resolution Bandwidth : x Peak (6dB Bandwidth : 9kHz)

   CISPR Quasi-Peak (6dB Bandwidth : 9kHz)

- Measurement channel : CH40 (904.750 MHz)

| Power Lead Tested | Frequency (MHz) | Measured Value |              | Emission Level |      | Limit ( ) | (*) Margin (dB) |
|-------------------|-----------------|----------------|--------------|----------------|------|-----------|-----------------|
|                   |                 | Peak (dB )     | Q-Peak (dB ) | (dB )          | ( )  |           |                 |
| Live to Ground    | 0.65            | 24.2           | -            | 24.2           | 16.2 | 250       | -23.8           |
|                   | -               | -              | -            | -              | -    | -         | -               |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
| Neutral to Ground | 3.78            | 24.1           | -            | 24.1           | 16.0 | 250       | -23.9           |
|                   | -               | -              | -            | -              | -    | -         | -               |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |
|                   |                 |                |              |                |      |           |                 |

Note : The noise floor level of the spectrum analyzer was observed in 22dB .

The highest emission level was reported .

And refer to measured graphs on next page.

\* Margin(dB) : Emission Level (dB) - Limit (dB)