

# INTERTEK TESTING SERVICES

## MEASUREMENT/TECHNICAL REPORT

**Artchief Industries Ltd. - Model: HCG1000**  
**FCC ID: NZT-HCG1001RX**  
**Date: July 16, 1998**

This report concerns (check one: )      Original Grant       Class II Change

Equipment Type: Superheterodyne Receiver (example: computer, printer, modem, etc)

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?      Yes       No

If yes, defer until: \_\_\_\_\_  
date

Company Name agrees to notify the Commission by: \_\_\_\_\_  
date

of the intended date of announcement of the product so that the grant can be issued on y  
that date.

Transition Rules Request per 15.37?      Yes       No

If no, assumed Part 15, Subpart B for unintentional radiator - the new 47 CFR [10-1-96  
Edition] provision.

Report prepared by:

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# INTERTEK TESTING SERVICES

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## Table of Contents

1.0	<b><u>General Description</u></b>	2
1.1	Product Description	2
1.2	Related Submittal(s) Grants	2
1.3	Test Methodology	2
1.4	Test Facility	2
1.5	Attestation	2
2.0	<b><u>Emission Results</u></b>	4
2.1	Radiated Emission Results	5
2.2	Radiated Emission Configuration Photograph	6
3.0	<b><u>Equipment Photographs</u></b>	9
4.0	<b><u>Product Labelling</u></b>	11
4.1	Label Artwork	12
4.2	Label Location	13
5.0	<b><u>Technical Specifications</u></b>	15
6.0	<b><u>Instruction Manual</u></b>	19

# INTERTEK TESTING SERVICES

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## List of Figures

Figure 4.1 FCC ID Label .....	12
Figure 4.2 Label Location .....	13
Figure 5.1 Superheterodyne Receiver Block Diagram .....	16
Figure 5.2 Superheterodyne Receiver Schematic .....	17

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**EXHIBIT 1**

**GENERAL DESCRIPTION**

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## 1.0 General Description

### 1.1 Product Description

The equipment under test (EUT) is a superheterodyne receiver of a RF wireless headphone system. The EUT is powered up by two AAA size batteries. On the EUT, there is a knob to tune the receiving frequency from 49.5 MHz to 51.3 MHz. The following list shows the technical description of the EUT.

- Q<sub>1</sub> and the associated circuit act as a RF amplifier.
- U<sub>1</sub> and the associated circuit act as a Radio IC.
- U<sub>2</sub> and the associated circuit act as a power amplifier.

### 1.2 Related Submittal(s) Grants

This is a single application for Notification of a superheterodyne receiver. The FCCID of the transmitter associated with this receiver is NZR-HCG1002TX and has been filed at the same time as this application.

### 1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (1992). All measurements were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. For each scan, the procedure for maximizing emissions in Appendices D and E were followed. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.

### 1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. This test facility and site measurement data have been placed on file with the FCC.

### 1.5 Attestation

Enclosed please find the Attestation which is filled by the applicant.

## ARTCHIEF INDUSTRIES LIMITED

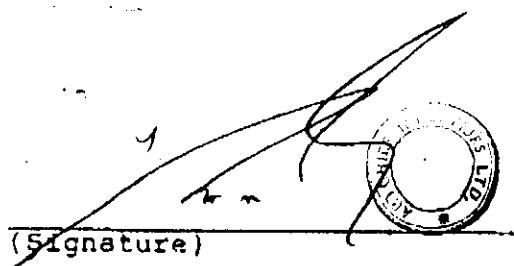
## ATTESTATION

This equipment has been tested in accordance with requirements contained in the appropriate Commission regulations. To the best of my knowledge, these tests were performed using measurement procedures consistent with industry or Commission standards and demonstrate that the equipment complies with the appropriate standards. Each unit manufactured, imported or marketed, as defined in the Commission's regulations, will conform to the sample(s) tested within the variations that can be expected due to quantity production and testing on a statistical basis. I further certify that the necessary measurements were made by Intertek Testing Services, 2/F1., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.

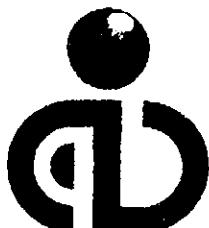
49. GARMENT WIRELESS HEADPHONE40001000

ARTCHIEF INDUSTRIES LIMITED  
(Manufacturer)

20 MAY 1998  
(Date)

  
(Signature)

MANAGING DIRECTOR  
(Title)



FCCID: NZT-HCG1001RX

12/F., 81 Hung To Road, Kwun Tong, Kowloon, Hong Kong.

TOTAL P.02

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**EXHIBIT 2**

**EMISSION RESULTS**

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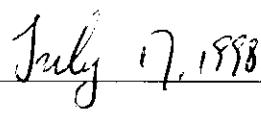
### 2.0 Emission Results

The judgement on the radiated emission test together with the corresponding configuration photographs are included in the following pages.

#### ***TEST PERSONNEL:***

  
*Test Signature*

Kenneth H. M. Lam, Electronics Engineer  
*Typed/Printed Name*

  
*Date*

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### 2.1 Radiated Emission Results

Radiated Emissions from the EUT fulfilled the requirement in §15.109(a). The worst case radiated emission is 15.7 dB below the limit at 49.546 MHz.

Configuration photographs are included in the following pages.

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**EXHIBIT 3**

**EQUIPMENT PHOTOGRAPHS**

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### 3.0 Equipment Photographs

External photographs of the tested EUT are attached.

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**EXHIBIT 5**

**TECHNICAL SPECIFICATIONS**

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### 5.0 Technical Specifications

The block diagram and schematic of the superheterodyne receiver are attached.