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Federal Communications Commission
EQUIPMENT APPROVAL SERVICES
PO Box 358315
Pittsburgh, PA 15251-5315

Re: Request for Certification

Enclosed is an application, fee in the amount of \$485 which includes the Request for Confidentiality fee of \$135, and exhibits for certification of Superregenerative Receiver Model JCIRX which is manufactured by Chamberlain.

The final instruction sheet is not available at this time, so I have included a typical instruction sheet indicating the FCC statement and important information.

The FCC ID of this model, upon certification, will be HBW1304.

We would appreciate your prompt attention to the submittal.

Sincerely,
THE CHAMBERLAIN GROUP, INC.

A handwritten signature in black ink that reads "Barbara P. Kelkhoff". The signature is written in a cursive style with a large initial 'B'.

Barbara P. Kelkhoff
Manager, Product Safety

LIST OF EXHIBITS
Superregenerative Receiver
Model JCIRX

1. Expository Statement
2. Theory of Operation
3. Schematic
4. Photographs
5. FCC Label Drawing
6. Operating Instructions
7. Test Report

EXPOSITORY STATEMENT
Superregenerative Receiver
Model JCIRX

1. Since the final instruction sheet is not available at this time, a typical draft version has been included. The instructions include statements required to assure compliance with the Commission's Rules; Part 15.
2. Labeling is in accordance with the Commission's labeling requirements, Parts 2 and 15, Section 15.19.
3. This receiver is intended for use with certified transmitters of our manufacture only.
4. The JCIRX receiver is factory set to $390 \pm 0.1\%$ MHz.. It is not intended to be readjusted in the field, and specific instructions prohibiting tampering are provided to the user.
5. Test data for Model JCIRX is part of this submission. No emissions were detected in the forbidden bands below 1.0 GHz.

Certified by:

Barbara P. Kelkhoff

Barbara P. Kelkhoff
Manager, Product Safety

CIRCUIT DESCRIPTION FOR BATTERY RADIO RECEIVER MODEL JCIRX

(Please refer to enclosed schematic drawing: 195D1377 Rev. C)

The wire from A100 to A101 and PCB trace through R155 form an antenna. L151, L152, C152 and C153 comprise the bandpass filter tuned to 390.0 MHz.

Q5, R151, R152, R153, R154 and C155 comprise an RF buffer to block back radiation from the superregenerative detector. C101 couples the buffer to the detector.

T101 and C102 select the desired frequency ($390 \text{ MHz} \pm 0.1\%$). Q101 bias resistors are R101, R102, R103 and R104. L102 and C106 form the self-quench network for Q101. C103 is the feedback capacitor. C104 and C105 control the junction capacitance. C107 and R105 comprise the first quench filter.

L150, C150, C151, C154 and R150 isolate the detector and RF buffer from the outside world to prevent conducted RF emissions from passing through to other receivers.

U4:A is a two stage active low pass filter. U4:D is a conventional audio amplifier used to bring the demodulated levels of the filter output up to a level sufficient for U4:C to digitize the data which drives the digital decoder/logic IC, U3. If the incoming code matches the programmed code the unit will either be armed or disarmed.

The power supply is derived from the +12V of battery and is regulated through a 5V regulator, U1.

1. EXPOSITORY STATEMENT

2. THEORY OF OPERATION

3. SCHEMATIC

4. PHOTOGRAPHS

5. FCC LABEL DRAWING

6. OPERATING INSTRUCTIONS

7. TEST REPORT