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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 \$940, and exhibits for Certification of a Remote Control Transmitter, Model 1A5247.

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 HBW1A5247.

We would appreciate your prompt attention to the submittal.

Sincerely,  
THE CHAMBERLAIN GROUP, INC.

A handwritten signature in cursive script that reads "Barbara P. Kelkhoff".

Barbara P. Kelkhoff  
Manager, Product Safety

**LIST OF EXHIBITS**  
**3 FUNCTION, REMOTE CONTROL TRANSMITTER**  
**MODEL 1A5247**

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

**EXPOSITORY STATEMENT**  
**3 FUNCTION, REMOTE CONTROL TRANSMITTER**  
**MODEL 1A5247**

1. Since the final instruction sheet is not available at this time, a marked-up typical 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 transmitter is intended for use with the certified receivers of our manufacture only.
4. The transmitter is equipped with an automatically releasing push-button switch. Transmission is terminated upon release of the push-button.
5. The 1A5247 is factory set to  $390 \pm 0.1\%$  MHz. It is not intended to be readjusted in the field, and specific instruction prohibiting tampering are provided to the user.
6. Test data for the Model 1A5247 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

**THEORY OF OPERATION AND  
CIRCUIT DESCRIPTION  
MODEL 1A5247  
3 FUNCTION, REMOTE CONTROL TRANSMITTER**

(Please refer to enclosed schematic drawing: 195D1255D)

The 1A5247 transmitter consists of a low power RF oscillator (Q1 and associated components), a digital encoder (U1 and related components), and on/off switches.

The RF oscillator, Q1, is of the grounded base type. C4, C5, C6, C7, and the copper loop, L2, set the center frequency of the oscillator at 390 MHz. C3, L1, L2 and C2, with the internal capacitance of Q1, establish feedback levels and harmonic suppression. R3, R4 and R6 establish dc operating conditions on Q1 and help improve temperature stability. U1 and related components generate a digital code. This code is used in the companion receiver to identify a particular transmitter or functions. The 3V battery circuit is equipped with an automatically releasing (normally off) push-button switches. D1, D2, and D3 supply voltage to Q1 and U1 when SW1, SW2 or SW3 are depressed.

SW1-SW3, and related components, R1, R2, R7-R9 and U1 provide three input functions. The digital signal at U1 (pin 1) is randomly programmed at our factory location.

# **1. EXPOSITORY STATEMENT**

## **2. THEORY OF OPERATION**

### **3. SCHEMATIC**

## **4. PHOTOGRAPHS**



## **5. FCC LABEL DRAWING**

## **6. OPERATING INSTRUCTIONS**

## **7. TEST REPORT**