



UNIVERSITY OF MICHIGAN
COLLEGE OF ENGINEERING
THE RADIATION LABORATORY
DEPARTMENT OF ELECTRICAL ENGINEERING
AND COMPUTER SCIENCE

3228 EECS BUILDING
1301 BEAL AVENUE
ANN ARBOR, MICHIGAN 48109-2122
734 764-0500 FAX 734 647-2106
<http://www.eecs.umich.edu/RADLAB/>

May 8, 2000

Federal Communications Commission
Equipment Approval Services
P.O. Box 358315
Pittsburgh, PA 15251-5315

Re: Class II for Digi-Code Receiver
New Models: CR-5110, -5112, -5120, -5122
FCC ID: OWMHC-DIGICODE
CANADA:

Please find enclosed application materials for Class II permissive change of Digi-Code transmitter. There are four new models that are being added to the current two models, Models: CR-5100 and CR-5102. The new Models are CR-5110, -5112, -5120, -5122. We tested all four and found them to comply with Part 15, Subpart B.

In the current grant the two models are for 300 MHz and 310 MHz frequencies, respectively. Two of the new models are for 300 MHz and two for 310 MHz. In these models, the following changes have been made:

- (1) External wire antenna added to all models to improve sensitivity. Bent, 12 inches long. No changes were made in the receiver portion of the receiver other than make antenna connections on the board.
- (2) Change power input terminals and power requirements. Change relay output terminals.

The new models are:

CR-5110: 300 MHz, 12/24 VAC
CR-5112: 310 MHz, 12/24 VAC
CR-5120: 300 MHz, 110 VAC (Wall transformer required)
CR-5120: 310 MHz, 110 VAC (Wall transformer required)

If there are any questions regarding the application or testing performed, please contact me at the above address or call 734-647-1792, (lab) 734-483-4211, fax 734-647-2106, or e-mail liepa@umich.edu.

Sincerely,

A handwritten signature in black ink that reads 'Valdis V. Liepa'.

Valdis V. Liepa
Research Scientist

Enclosures:

Industry Canada Cover Letter
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May 8, 2000

Certification and Engineering Bureau
Industry Canada
3701 Carling Avenue, Bldg. 94
Ottawa, Ontario K2H 8S2

Re: Certification for Digi-Code TX and RR
TX Models: CR-5040, -5042, -5050, -5052
RX Models: CR-5110, -51112, -5120, -5122

Please find enclosed application materials for certification of Digi-Code transmitter and receiver. This is a family certification.

There are **four transmitter** models: CR-5040 (1-button, 300 MHz), CR-5050 (2-button, 300MHz), CR-5042 (1-button, 310MHz), CR-5052 (2-button, 310MHz). All use same PCB and have different population for 1- and 2-button versions with matching plastic. They are slug tuned to appropriate frequencies. We tested all four versions and found them to comply with RSS-210. The products are identified by:

Model: CR-5050
Model: CR-5042
Model: CR-5050
Model: CR-5052

Also, there are **four receiver** models: CR-5110 (300 MHz, 12/24 VAC), CR-5112 (310 MHz, 12/24 VAC), CR-5120 (300 MHz, 110 VAC; Wall transformer required), CR-5122 (310 MHz, 110 VAC; Wall transformer required).

Model: CR-5110
Model: CR-5112
Model: CR-5120
Model: CR-5122

Payment authorization attached to cover: (a) assessment, \$425.00 (CAN); and (b) certification, \$360.00 (CAN).

If there are any questions, suggestions, etc., regarding the application or testing performed, please contact me at the above address or call 734-647-1792, (lab) 734-483-4211, fax 734-647-2106; e-mail: liepa@umich.edu.

Sincerely,

Valdis V. Liepa
Research Scientist

Enclosures:

Application Form with payment
(This) Letter of Transmittal
Summary of Test Results
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May 13, 2000

Re: FCC Class II for Digi-Code Receiver
IC Certification for Digi-Code Receiver
FCC ID: OWMHC-DIGICODE
CANADA:

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