

March 14, 2002

Schrader Tire Pressure Transmitter  
FCC ID: MRXTG224AM01  
CANADA: 25461021812

Re: Class II Permissive Change/Re-assessment

The Schrader Model MRXTG224AM01 transmitter was modified to improve frequency stability and turn ON/OFF times.

The RF sections of the transmitter consist of two stages, the oscillator and the power amp. In the current design, for the ON-OFF modulation, both stages were turned ON-OFF by the RFdata line from the micro. In the new version, the oscillator is disconnected from RFdata and connected to VRF, which stays on for the duration of the transmission. R7, which controls the RF amplifier, is connected to RFdata. Because VRF comes on before RFdata the oscillator starts up before any data is input. There are no changes to the power levels or frequency with this change, it is merely to improve the switch on time of the oscillator, and effectively have the oscillator circuit powered on continuously from the ASIC.

This change required re-routing the traces on the PC board. Additionally, for availability and price reasons, the two RF transistors Q1 and Q2 were replaced with Philips parts BRF92A.



**SCHRADER ELECTRONICS**  
11 Technology Park,  
Belfast Road,  
Antrim.  
N.Ireland. BT41 1QS

### **Letter of Agency**

February 26<sup>th</sup>, 2001.

American Telecommunications Certification Body Inc.  
6731 Whittier Avenue  
Suite C110  
McLean, VA 22101

Re : Power of Attorney for Valdis V. Liepa

To Whom it may Concern :

Please be advised that Schrader Electronics Ltd. authorises Valdis V. Liepa to act on our behalf, until otherwise notified, for applications submitted to American Telecommunications Certification Body, Inc ( ATCB ).

We certify that we are not subject to denial of Federal benefits, that includes FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse ACT of 1988, U.S.C. 862. Further, no party, as defined in 47 CFR 1.2002(b), to the application is subject to denial of federal benefits, that includes FCC benefits.

Thank you for your attention to this matter.

Sincerely,

Brendan McDonnell, Project Leader  
Schrader Electronics Ltd.

Tel. +44 2894 482078

Fax +44 2894 468440

Date.



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/>

Re: Class II Permissive Change/Re-assessment  
for Schrader MRXTG224AM01 Transmitter  
Model: MRXTG224AM01  
FCC ID: MRXTG224AM01  
CANADA: to be provided by IC

#### POWER OF ATTORNEY

A letter granting Valdis V. Liepa the Power of Attorney is on file and can be provided when so requested.



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REQUEST FOR CONFIDENTIALITY

Pursuant to 47 CFR 0.459, Schrader requests that a part of the subject application be held confidential. This comprises Exhibits

- (5) Schematics
- (10) Parts List (Part of Exhibit only)

Schrader has spent substantial effort in developing this product and it is one of the first of its kind in industry. Having the subject information easily available to "competition" would negate the advantage they have achieved by developing this product. Not protecting the details of the design will result in financial hardship.

If there are any questions regarding this request, please contact me at the above address or call 734-483-4211, fax 734-647-2106 or e-mail [liepa@umich.edu](mailto:liepa@umich.edu).

Sincerely,

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

Valdis V. Liepa  
Research Scientist  
University of Michigan



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March 19, 2002

Re: Class II Permissive Change/Re-assessment  
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Model: MRXTG224AM01  
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STATEMENT OF MODIFICATIONS

There were no modifications made to the DUT by this test laboratory. (Also see Section 3.1 of the attached Test Report).

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

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Valdis V. Liepa  
Research Scientist



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Model: MRXTG224AM01  
FCC ID: MRXTG224AM01  
CANADA: to be provided by IC

### GENERAL PRODUCT INFORMATION

The device, for which certification is pursued, has been designed by:

Schrader Electronics Limited  
11 Technology Park, Belfast Road  
Antrim BT41 1QS, Northern Ireland

Jim Newport  
Tel: 011-44-2894-48-2066  
Fax: 011-44-1849-46-8440

It will be manufactured by:

Schrader Electronics Limited  
11 Technology Park, Belfast Road  
Antrim BT41 1QS, Northern Ireland

Jim Newport  
Tel: 011-44-2894-48-2066  
Fax: 011-44-1849-46-8440

It will be marketed and serviced by:

Schrader Electronics Limited