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Nemko Canada Inc.  
303 River Road  
Ottawa, Ontario, Canada  
K1V 1H2

FCC ID: ENPRADPVHF

Product Name: Radius+ VHF

## RE: Operational Description

The Radius+ VHF / 195M TNB System is comprised of a 25 Watt signal amplifier combined with a 195M transceiver serving as the signal source. These two systems are not operated independently of each other and are only used as a complete TNB-class system. The Radius+ VHF does not contain modulation or demodulation circuitry, but only serves as a signal amplifier in the TX mode of operation. The amplifier is only ever used in conjunction with the 195M transceiver that it was tested with. The 195M modulation type is 4-level FSK with an occupied bandwidth of 4.33KHz or 6.46KHz for 6.25KHz/12.5KHz channel spacing modes respectively. The 195M and Radius+ VHF are designed to operate over the 150-174 MHz frequency range. The circuit includes a TX/RX switch that allows a filtered, low loss path between the two ports during RX mode. In the TX mode, the input to output port signal is amplified by a gain of approximately 8dB. For purposes of example MPE calculations, a max antenna gain of 8 dBd (10.15 dBi) is specified.



**ELECTRONIC SYSTEMS TECHNOLOGY, INC.**  
415 North Quay St. • Kennewick, WA 99336  
Phone (509) 735-9092 • Fax (509) 783-5475