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Client: Banner Engineering Corporation
Model: RM912HP
Standards: FCC 15.247/IC RSS-210
ID's: UE3RM912HP/7044A-RM912HP
Report #: 2009324

Appendix D: FCC Limited Modular Approval – DA 00-1407

Please refer to the following page• .



Re: Limited Modular Approval

To Whom It May Concern:

Banner Engineering Corp. would like to apply for limited Modular Approval for the RM912HP radio transceiver product. This letter is our application for such according to FCC public notice DA 00-1407. Banner Engineering will retain complete control of the use and installation of this product such that full compliance of all end products is assured.

The following table contains the criteria for a full modular approval and addresses how the RM912HP plus its carrier board address each requirement. The criteria are excerpted and summarized from the FCC Public Notice DA 00-1407.

The RM912HP is the device that will carry the limited Modular Approval, the DX180 carrier board is the board onto which the RM912HP was installed for testing.

Criteria		RM912HP satisfaction of requirements.	RM912HP plus DX180 carrier board satisfaction of requirements.
1.	The modular transmitter must have its own RF shielding.	The RM912HP includes a brass shield over the entire device.	
2.	The modular transmitter must have buffered modulation/data inputs.	The Atmel AT68RF212 single chip radio transceiver ASIC contains its own data registers and does not permit direct modulation of the carrier. Maximum data rate is hardware limited by the AT68RF212.	
3.	The modular transmitter must have its own power supply regulation.	The RM912HP contains all necessary bypass components on DC supply planes. The AT68RF212 contains two internal voltage regulators for its analog and digital sections.	The voltage regulator function for the power amplifier is performed on the carrier board, which is under Banner design control.
4.	The modular transmitter must employ a unique connector	The RM912HP RF connector is a solderable connection only and not accessible without proper board construction and soldering techniques.	The DX180 carrier board contains the unique antenna connector (reverse polarity SMA).
5.	The modular transmitter must be tested in stand-alone configuration	The RM912HP was tested installed upon the DX180 carrier board which is only responsible for providing power and for loading the configuration registers on the AT86RF212.	
6.	The modular	RM912HP will be labeled directly at	

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	transmitter must be labeled with its own FCC number.	the time of manufacture, or will be labeled on the exterior of the housing, depending on application.	
7.	The modular transmitter must comply with any specific rules.	The RM912HP complies with all operating requirements as tested; no user intervention is required.	
8.	The modular transmitter must comply with exposure requirements.	The RM912HP complies with all exposure requirements as tested.	

Banner Engineering will manufacture these units for use within its own products. Banner will control the manufacture of the product and thereby assure the module is not altered in any non-conforming manner.