

May 30, 2004

14085 Howard Rd  
Dayton, MD 21036

Federal Communications Commission  
7435 Oakland Mills Road  
Columbia, MD 21036

Re: FCC ID:J2LKDRF

Gentlemen:

Submitted herewith is an application for a low frequency transmitter module to be used in a series of printers having essentially same form factor. In accordance with the requirements set forth in DA 00-1407 Released: June 26, 2000, this device incorporates the design features as described and listed below for Part 15 limited modular transmitter approval:

1. The modular transmitter has its own RF shielding. As can be seen from the test site photos, the device was tested outside the host equipment that provided data and power to the unit. The PC board with the RF circuit incorporated is contained within the internal shield as shown in the photo. This basic pc board assembly is host to the RF transmitter circuit and is used across many printers comprising a family of products using the KDRF board that have the same basic mechanical and electrical specifications.
2. This modular transmitter only has data inputs from the basic printer and toner cartridge assembly thus ensuring that the module will continue to comply with Part 15 requirements and no conditions of excessive data rates or over-modulation can occur.
3. This modular transmitter receives its DC power from a regulated supply providing power to the main PC board. The design of the power supply circuitry in the printers into which the PC board is installed requires a regulated supply voltage at a fixed level to the PC board thus ensuring the modular transmitter will always receive the correct regulated voltage.
4. The modular transmitter complies with the antenna requirements of Section 15.203 and 15.204(c) and is a small multi-turn inductively coupled loop antenna that couples to the toner cartridge.
5. This modular transmitter was tested in a stand-alone configuration outside the host device during testing. The host device is an ac-powered unit intended to be used as an office/business printer. No modifications were made to the host device.
6. This modular transmitter is labeled with its own FCC ID number, and, if the FCC ID is

not visible when the module is installed inside another device, then the outside of the device into which the module is installed will also display a label referring to the enclosed module. This exterior label will use this wording: "Contains FCC ID: J2LKDRF".

7. This modular transmitter complies with all operating requirements applicable to the transmitter.
8. This modular transmitter complies with applicable RF exposure requirements. Its measured field strength level is 0.7 uV/m at 300 meters when extrapolated using inverse square method from measurements made at 3 meters. Further, the module is intended to be installed inside a host device which provides additional isolation from the user. Specific installation and operating instructions for users are not required as the only user installed portion of this system is replacement toner cartridges that have very fixed installation procedures.

If there are any additional questions, please contact me at 410-531-3439.

Sincerely yours,

Phillip Inglis  
TRP/Cetecom bvba