

DATE: 11/09/2015

SUBJECT: Class 2 Change for LTX Limited Module - FCC ID: O76-T4SG0910A

Dear Timco,

This letter is in support of the request for a class two change for the limited modular approval. This class 2 change is for the existing Limited Module already approved for use in Gojo Industries, Inc. touch-free Dispenser types LTX-7 and LTX-12 only – referred to as Host in this and other documents.

The class two change is requested because we made a layout change to the transmitter Printed Circuit Board (PCB) to eliminate the antenna switch and the second antenna.

No changes were made to the Host pump housing. A retest to the FCC 15.249 requirements was performed and a test report has been submitted. Only photos of the changes to the transmitter PCB have been supplied with this submission. There are no confidentiality requirements for this class 2 change but the confidentiality letter from the previous module approval submission where schematics and block diagrams were submitted should remain in effect. Below is same previously submitted itemized list documenting compliance with the FCC modular approval requirements in the Section 15.212 rules for unlicensed modules.

Below is **BOLD** is Gojo response documenting compliance with the modular approval requirements in Section 15.212 rules for unlicensed modules:

1. The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly;

The module does not comply with this requirement as it is a Limited Module that can only be used in the Host LTX dispenser. The module meets the all emission requirements in the Host dispenser – see Gojo LTX FCC Test Reports and therefore the module does not need a shield.

2. The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal;

The module does not comply with this requirement as it is a Limited Module that can only be used in the Host LTX dispenser. Because it can only be used in the Host, no buffering of data inputs is required for proper operation or compliance to the emission requirements.

3. The module must contain power supply regulation on the module;

Although the module does have its own series 3.3VDC regulator for providing regulated power to the module, the module does not need to comply with this requirement as it is a Limited Module that can only be used in the Host LTX dispenser. No power supply regulation is required for proper operation or compliance to the emission requirements. The regulation is provided to safe guard the module circuitry incase the Host batteries are not installed properly.

4. The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b);

The module does comply with this requirement as the antenna is a simple 22AWG wire and that wire is soldered directly to the printed circuit board of the module.

5. The module must demonstrate compliance in a stand-alone configuration;

The module does not comply with this requirement as it is a Limited Module that can only be used in the Host LTX dispenser. Because it can only be used in the Host it therefore cannot be used in a stand-alone or in any other configuration.

6. The module must be labelled with its permanently affixed FCC ID label, or use an electronic display (See KDB Publication 784748 about labelling requirements);

The module does comply with this requirement as FCC ID label is fixed to the modules – see photos of label location.

7. The module must comply with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee;

The module complies with this requirement and an installation manual is provided to Gojo licensed distributors containing instructions of how to install the module into the Host dispenser. See Install Manual provided.

8. The module must comply with RF exposure requirements;
The module does not comply with this requirement as it is a Limited Module that can only be used in the Host LTX dispenser. The host dispenser is a 15.249 device that does not have RF Exposure requirements – therefore this test was not performed.