

Millar Instruments Ltd
Level 1, 70 Symonds Street
Auckland 1010
New Zealand



To:
Federal Communications Commission

9th Aug 2016

SUBJECT: Changes to FCC ID: V58HU71 - TR181 - SmartPad

To whom it may concern:

I am writing to you to advise of the changes associated with our class 2 permissive change to the aforementioned products.

TR190 - Configurator
TRM54 - Telemeter
TR181 - SmartPad

These products now have a new channel map between the actual radio frequency channel (e.g. in GHz) and the name the users call them (e.g. “channel 1”).

This was done to increase the number of channels available for the users.

With regard to FCC certification, all channels are still within the part 15 band for low power radio (between 2.402 GHz and 2.480 GHz).

In all cases the only change is to allow these devices to operate at a lower frequency of 2.402 GHz (previously the lowest was 2.405 GHz).

The change was made by adding a lower predefined channel to the range of channels available through our configuration software.

This software sends configuration data to the transmitters in the devices in the system (TR181, TRM54 and TR190) to determine what channel (frequency) they operate on.

The software controls the channel that the TR181 and TRM54 devices operate on by sending configuration data via the configurator device (TR190) which receives the commands from a USB bus connected to the computer.

All of these devices can only be commanded to operate on our preset channels (from a predefined list) meaning that there is no way for a user to operate outside of the grant of authorization frequencies.

Outside of the operating software there is no way to configure any of the three devices that make up the system as the nature and format of the configuration data is not known to users.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'David Budgett', with a stylized flourish at the end.

David Budgett
Director of Innovation

Millar Instruments Ltd
Level 1, 70 Symonds Street
Auckland 1010
New Zealand



To:
Federal Communications Commission

15th Aug 2016

SUBJECT: Changes to FCC ID: V58HU71 - TR181 SmartPad

To whom it may concern:

I am writing to you to advise of the changes associated with our class 2 permissive change to the aforementioned products:

**V58HU71 - TR181 SmartPad,
V58HU70 - TRM54 Telemeter,
V58HU72 - TR190 Configurator**

These products now have a new channel map between the actual radio frequency channel (e.g. in GHz) and the name the users call them (e.g. "channel 1").

This was done to increase the number of channels available for the users.

With regard to FCC certification, all channels are still within the part 15 band for low power radio (between 2.402 GHz and 2.480 GHz).

In all cases the only change is to allow these devices to operate at a lower frequency of 2.402 GHz (previously the lowest was 2.405 GHz).

Yours sincerely,

David Budgett
Director of Innovation



10th August 2016

Permissive change request re FCC ID: V58HU71 - TR181 SmartPad

Recently my client requested permissive change testing of the item with the above FCC ID.

The frequency range of the short range transmitter in this device has been increased from 2405.0 - 2480.0 MHz to 2402.0 - 2480.0 MHz.

My client advises that no hardware changes were required to the device in order to achieve this increase in frequency range.

The only changes made were minor software changes to enable the lower channel of 2402.0 MHz.

Testing shows that when the device operates on the new frequency of 2402.0 MHz it remains compliant with FCC part 15 section 15.249.

All other documents previously uploaded remain the same and have therefore not been uploaded again.

A handwritten signature in black ink, appearing to read "Andrew Cutler", is written over a light blue rectangular background.

Andrew Cutler
General Manager
EMC Technologies