



ZENNER
All that counts.

January 12, 2017

American Certification Body
6731 Whittier Ave
C110
McLean, VA 22101

Attn:
Gregory Czumak
Review Engineer

RE: Zenner Performance Meters d.b.a. Zenner USA
FCC ID: 2ACOABTIR
Ref: ATCB020351

Question from ACB:

6. Regarding the EUT's USB connector, the Operational Description states that "data cannot be transferred by this USB connection." Since USB charging typically includes some form of handshake, please explain how this has been disabled. Please note that even the presence of just this handshake would constitute "data", and require an additional JBP authorization for the EUT (DoC or Certification). The test report states that the EUT was programmed for testing via the USB port, apparently indicating a standard USB connection necessitating JBP authorization – please clarify.

Ans:

There is the statement in the test report which was found to be in error.

In Section 2.3 of the

"FCC Certification Test Report for the Zenner USA Bluetooth Installation Radio (BTIR)

The test report has been revised to correct the error and has been resubmitted as REV 1.

From the FCC ID: 2ACOABTIR" test report

"2.3 Testing Algorithm

The Bluetooth Installation Radio (BTIR) was programmed via the USB port on the EUT from the support laptop. The support laptop used a terminal program to command the EUT to transmit on the lowest, center, and highest channels in either mesh or driveby modes. Commands were also sent to allow the unit to transmit in a hopping fashion. The unit was preloaded with a typical data payload to transmit. Worst case emission levels are provided in the test results data."

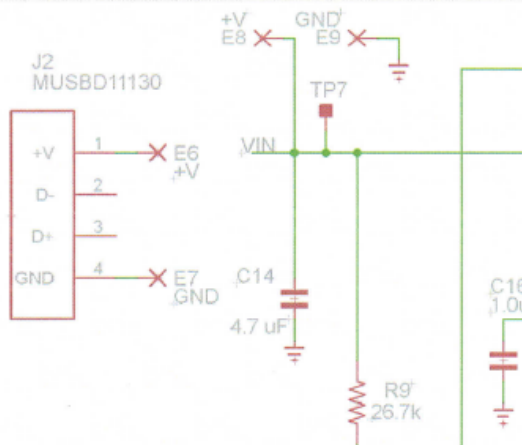
The first line of Section 2.3 should read:

"The Bluetooth Installation Radio (BTIR) was programmed and controlled via the internal programming header (J1) on the EUT from the support laptop."

J1 is a 6 circuit connector that is not populated in production but provides a mechanism for programming the BTIR. It contains a 2 wire data interface, power, ground and programming control pins. It is not accessible or useful to the User unless the BTIR is opened and if the User knows the appropriate passwords, commands and connections. The BTIR can only be programmed or controlled through a serial port to data level adapter connected to J1, not through the USB port.

With regard to handshaking signals, it is not required to provide handshaking signals to obtain power from a USB port, USB Hub or charging port. Available power can be increased to reduce charging time or reduced and system resources conserved by limiting the power to the needs of the device when the device is enumerated but this function is not required. In the BTIR, the nominal charging current is approximately 500 mA. USB ports are typically limited to a total of 500 mA. Within the BTIR, the charging circuits are set to 500 mA current draw.

The USB connector of the EUT provides a convenient and recognized connection mechanism for applying charging power to the EUT. Only power and ground is connected internally. See the pertinent section of the schematic attached. J2 is the USB connector of the EUT. Connection is made between E6(+V) and E8(+V) and between E7(GND) and E9(GND) for charging power only. The USB data signals are at J2-2 (D-) and J2-3 (D+). No connections are made from J2-2 (D-) or J2-3 (D+). No data is transferred through the USB connector.



Sincerely,

Kenneth J. Derry P.E.

Kenneth J. Derry P.E.
Hardware Development Engineer