Supplemental Information NS-WF121 User Manual (Datasheet)

The User Manual for radio module FCC ID 2AZHPG05300 is the same as the User Manual submitted for the original Grant for radio module FCC ID QOQWF121. Other than the differences listed below, the User Manual of the original Grant can be used for FCC ID 2AZHPG05300. This device complies with Part 15 of the FCC Rules.

1. Radio Module / Host Device Information for Labeling

Radio Module Model Number	NS-WF121	
Radio Module FCC Identifier	2AZHPG05300	
Host Device Model Number	Neuron-Spectrum-AM	
Host Device Manufacturer	Neurosoft Ltd	
Host Device Label to Include	Contains FCC ID 2AZHPG05300	

2. Portable Use Condition Statement

The Neuron-Spectrum-AM device (the Host device) is a portable, battery-powered digital neurophysiological device that records biopotential signals such as electroencephalography (EEG). The Host device incorporates a 2.4GHz Wi-Fi radio module. The Host device is worn by the user in a special carrying pouch. The radio module and the antenna are located inside the Host device. SAR test results indicate that the Host device complies with the RF radiation exposure limits of the FCC.

3. Radio Module Integration Instructions

The NS-WF121 radio module is not intended for sale to third parties. This module specific design implementation will be integrated into an electroencephalography (EEG) recorder (Model Neuron-Spectrum-AM) manufactured by Neurosoft.

The following two integration conditions apply:

- a. The transmitter module must not be changed in anyway (mechanics, electronics or software) as delivered by the original OEM.
- b. The transmitter module must not be co-located or operated in conjunction with any other antenna or transmitter.

4. Antenna Information

The qualified antenna specification to be used with this radio is listed below. Antennas having a peak gain greater than 2.68 dBi are strictly prohibited for use in this specific design implementation. The required antenna impedance is 50 ohms.

Antenna Specifications for NS-WT121		
Antenna Type	Maximum Gain (Peak Gain)	Impedance
Dipole	2.68 dBi	50 Ohms

Table 1. Antenna Specifications

Any antenna that is of the same type and of equal or less directional gain as listed in *Table 1* can be used without a need for retesting. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that

permitted for successful communication. Using an antenna of a different type or gain more than 2.68 dBi will require additional testing for FCC.

5. Antenna Location and Installation

The Antenna is installed in a dedicated recess located inside the upper end of the front enclosure in accordance with Neurosoft drawing 053201.006CB as shown in *Figure 1*.



Figure 1. Antenna Installation Inside Host

6. Radio Module Location and Installation

The radio module (NS-WF121) is located on the host control board. The module is soldered to the control board on an automated line in accordance with Neurosoft assembly drawing # 053101.024SB. The control board is installed over the antenna module inside the host front enclosure as shown in *Figure 2*.



Figure 2. Radio Module Installation Inside Host