

Technical Description of the A500 Adapter

The A500 is a Bluetooth™ Class 2 (2.5mW maximum) adapter device, which receives and transmits in the frequency range of 2.402-2.480GHz. It is a spread spectrum (frequency hopping) headset; 79 channels, 1MHz Bandwidth, frequency hops at 1600 hops/second per the Bluetooth standard. The product communicates with other Bluetooth headsets using a Time division duplex scheme that alternates transmission and receive functions, and thus uses the same antenna to transmit and receive at different times.

The Philips Baseband chip controls the Philips radio chip, provides voltage regulation, battery charging, and is provided its clock input from the 13MHz crystal oscillator. The same omni directional -3dBi antenna is used to send and receive RF signals. Battery charging is done with a pulse width modulation to charge a 150-170mAH rechargeable Nickel Metal Hydride battery.

The A500 is a Bluetooth™ adapter intended to be used with non- Bluetooth™ phones. It is hardwired with a standard 2.5 mm 3 conductor plug, 2.5 mm 4 conductor plug, and Nokia specific adapter.

The A500 adapter is intended to be connected with the M1000 Bluetooth™ headset to allow non- Bluetooth™ phone users to become Bluetooth™ enabled.