



[Wi-Ex xBoost SOHO YX545 Review](#)

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We've done reviews on various Wi-Ex products over the past few years, and have been very pleased with the results in most of our testing. The [zBoost Metro](#) allowed us to improve our range in an area where we couldn't permanently run a dedicated antenna outside, and the [zBoost YX510](#) let me make phone calls within my office for the first time on AT&T. Now, Wi-Ex has continued on the success of it's 500 series with the YX545, or SOHO, dual band repeater kit. The SOHO is for consumers, extending the range of devices operating on 800 and 1900 MHz frequency bands. The YX545 SOHO is [available for \\$399 from Wi-Ex](#). The products used in this review were provided by Wi-Ex.

In the Box



- zBoost SOHO Base Unit
- Base Unit Antenna
- Signal Antenna
- Coax Cable
- Power Supply
- Signal Antenna Mounting Hardware



Specifications

PCS Band

- Frequency Uplink: 1850 to 1910 MHz, Downlink: 1930 to 1990 MHz
- System Gain 60dB
- PCS band supported A, D, B, E, F, C
- Networks CDMA, GSM, GPRS, EDGE, EVDO, 1xRTT, UMTS, HSPA, 3G

Cellular band

- Frequency Uplink: 824 to 849 MHz
- Downlink: 869 to 894 MHz
- System Gain 60dB
- Cell band supported A, B, A', B'
- Networks CDMA, GSM, GPRS, EDGE, EVDO, 1xRTT, UMTS, HSPA, 3G

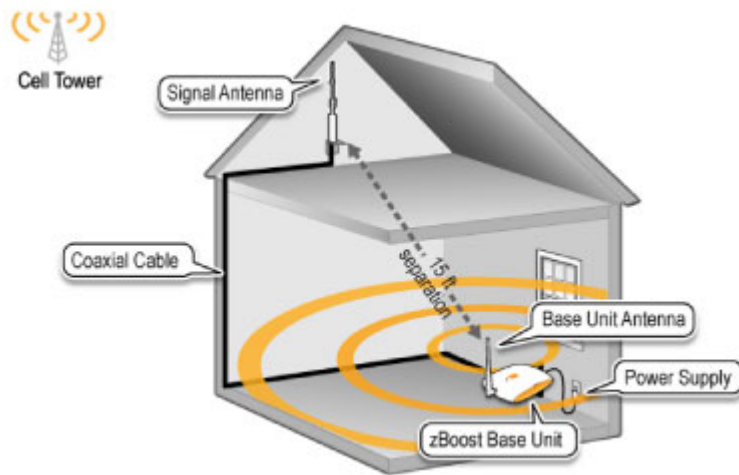
General

- Power Consumption – Power Supply Current 3W standby; 7W max signal – 5.0VDC, 2.0A Max
- Wall Supply Input ; Voltage 100-240VAC, 50-60 Hz
- Base Unit Size and Weight 5” x 7” x 1.25” – 9 oz.
- Operating Conditions Indoor Use Only (40° – 105° F)

About the zBoost SOHO

- Increases indoor signal coverage-up to 3000 sq ft
- Supports multiple users simultaneously
- Compatible with all U.S. carriers and mobile devices using 800 & 1900 MHz (except Nextel/iDEN or 4G, 2100MHz phones)
- Increases voice and data transmission
- Decreases dropped or missed calls
- Easy to set up – comes complete with everything you need
- No cradle or connections to your phone
- Extends phone battery life (uses less power when signal is stronger)
- Protects the carrier network using patented technology

Installation



Similar to the YX510, the SOHO has 2 antennas that need to be installed, the signal antenna, and the base unit antenna. Follow the [setup instructions](#) before permanently installing your antennas, and make sure that you can place calls near the window or wherever you plan to place the Signal Antenna. The base unit will only amplify signal that it receives at the signal antenna. Using your cell phone, place a call near the location you plan to install that signal antenna, to verify there is enough to be amplified. I ran my cables over a drop ceiling and outside my office through an existing conduit hole. This provided for an easy installation that is out of the way.



First, mount the Signal Antenna in an attic or outside where you've determined you've got solid signal. Use the mounting hardware to fasten the antenna securely, keeping it away from metal as much as possible. A few tips: higher on a wall or outside window is usually better, use the attachments in order to create different viewing angles, and the signal antenna must be installed vertically with the coax coming out from the bottom of the antenna. I chose to mount mine behind an exterior wall covered with EFIS. The Styrofoam construction allowed for great signal to be pulled in, with the sight of the antenna.



Then, connect the Base Unit Antenna and coax to the Base Unit and place it where you need signal. For the widest possible signal area, it is recommended that you position the Base Unit near the middle of a room or mount it on an interior wall. This Base Unit uses an omnidirectional antenna that delivers signal in a circular pattern around the antenna. The zBoost SOHO does require vertical separation; the Signal Antenna and Base Unit Antenna should have at least 15 feet of separation. Increasing separation of the 2 antennas will optimize the performance, and up to 40 feet horizontally will provide for optimal performance. Keep the base unit at least 2 feet away from other cords or metal objects, including other wireless devices such as routers.



Once everything is connected, plug in the power supply, and wait up to 60 seconds for the units to start broadcasting the signal. Use the LED indicator and the chart below to ensure your unit is functioning properly.

BASE UNIT LED INDICATORS
At Initial Power Up Only

Solid GREEN	Normal condition at power up.
Slowly Alternating RED and GREEN	zBoost is working, but at reduced performance and coverage due to "non-ideal" setup. Increase the distance between antenna and amplifier to achieve maximum performance and coverage.
Fast Flashing RED	Indicates insufficient distance between the antenna and the amplifier. The amplifier is operating at significantly reduced coverage.
Solid RED	System is receiving signals from either the mobile device or the base station transceiver which are too strong for proper operation.
Fast Alternating RED and GREEN followed by no light	The amplifier is disabled.

After Initial Power Up

Solid GREEN	Normal condition
Solid RED	System is receiving signals from either the mobile device or the base station transceiver which are too strong for proper operation. Unplug your system and re-orient the Signal Antenna and/or Base Unit to reduce excessive signal. If LED remains RED after reconnecting power, contact customer support at 1-800-871-1612.

Use and Results

The SOHO is rated to cover up to 3000 sq. feet in open areas based on signal level, placement of the antennas and building construction. My tests yielded about a third, giving me reliable coverage throughout approximately 1200 square feet of office space with metal stud walls, and a base antenna mounted underneath a desk to give the necessary vertical separation. Using the Verizon Blackberry Curve 8530, Sprint Blackberry Bold 9650 and the AT&T iPhone 4, signal increases when using the SOHO are noticeable, providing a 15-20dBm increase, and negating the need to be right on top of the antenna to make it useful. Working in an area that has constantly been a struggle for me with AT&T, Sprint and T-Mobile, the SOHO reliably allows

me to make and receive phone calls, as well as use the data connection on 1900mhz devices. The unit also enhances the 850mhz band, but this difference was less noticeable for me, as the Verizon service in my area is quite good. Data speeds fluctuated a bit, but overall, were strong enough that each of the carriers consistently saw 1Mbps download, and 300-700 (depending on the carrier) upload.

Overall

For \$400, the zBoost SOHO Cell Phone Signal Booster from Wi-Ex is a great home or office solution for those who need a “boost”. The SOHO works as advertised, and allows phones to be used in areas that have poor service more reliably.

<http://thecellphonejunkie.com/2011/02/06/wi-ex-xboost-soho-yx545-review/>